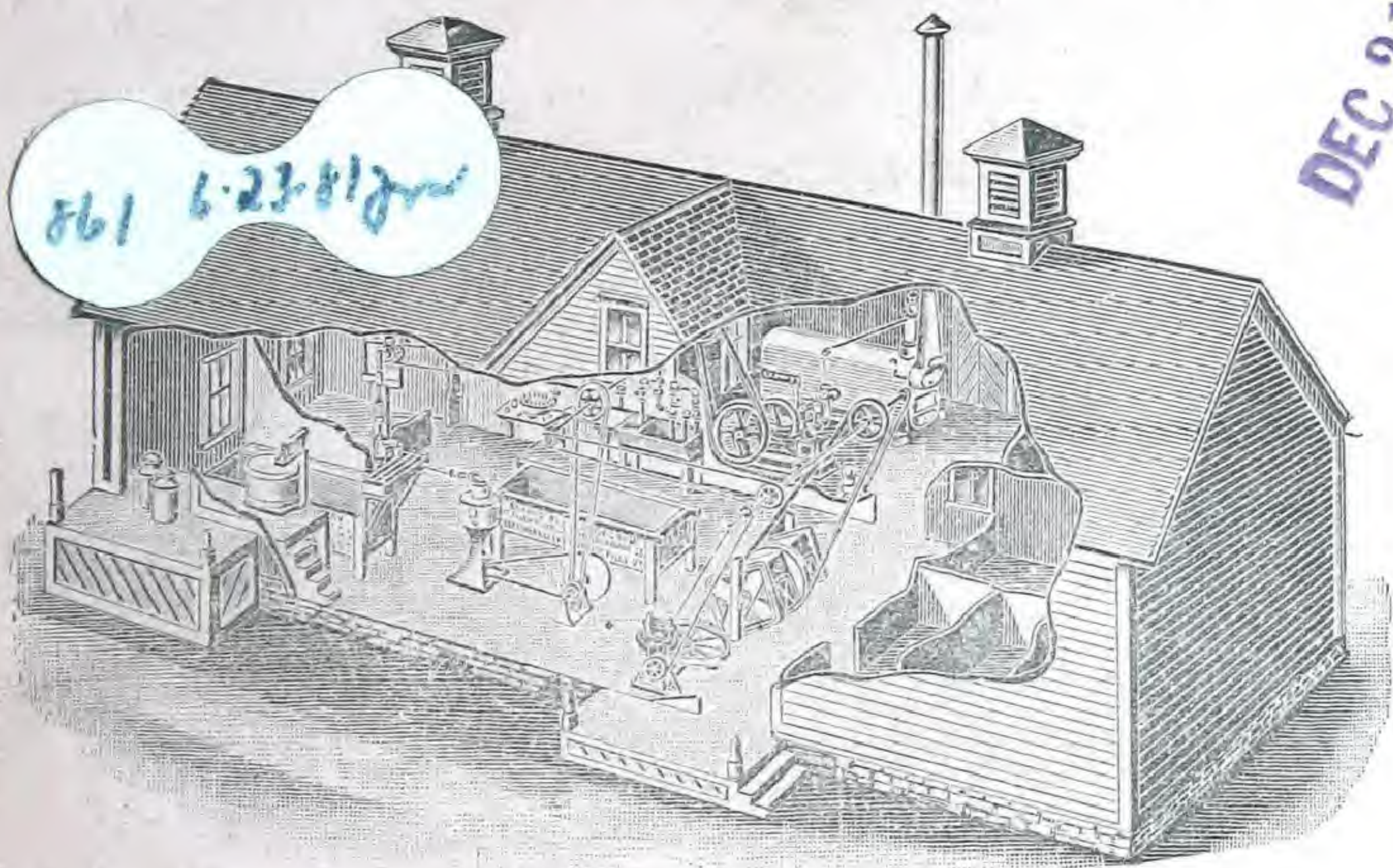


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CREAMERY
ARCHITECTURE

Good Buildings and Equipments
at
Moderate Prices.

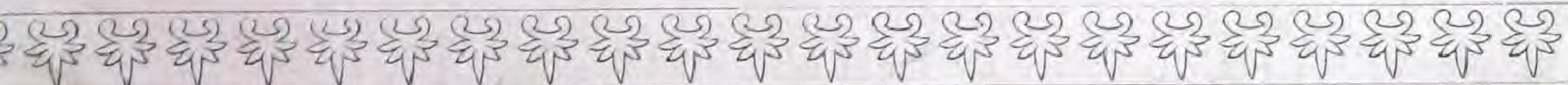


Published by the
VERMONT FARM MACHINE CO.,

Manufacturers of and Dealers in Everything
... for the Dairy and Creamery ...

BELLOWS FALLS, VERMONT.

No. 133.



UP TO DATE.

Vermont and New Hampshire

GIVE HIGHEST HONORS TO THE

IMPROVED UNITED STATES CREAM SEPARATOR.

Vermont's Highest Prizes:

Creamery Sweepstakes.

Grand Sweepstakes.

Gold Medal.

At the Annual Meeting of the **Vermont Dairymen's Association** at Rutland, January 7, 8 and 9, 1896, awarded

Butter from Cream separated by the
UNITED STATES CREAM SEPARATOR.

R. F. JAYNES, of Jersey Hill Creamery, Ryegate, Vermont, was the fortunate winner, it being the **second time** he has held the Gold Medal with the product of **The United States Cream Separator.**

10 Prizes out of a possible 18 awarded the product of our Apparatus.

HISTORY REPEATS ITSELF.

In 1894, at Annual Meeting of the same Association, there were awarded

Gold Medal, Grand Sweepstakes and Creamery Sweepstakes
to Butter made from Cream Separated by the **UNITED STATES CREAM SEPARATOR.**

In 1895, at the Annual Meeting of this Association, the Creamery Butter scoring the highest was made from Cream Separated by the

UNITED STATES CREAM SEPARATOR.

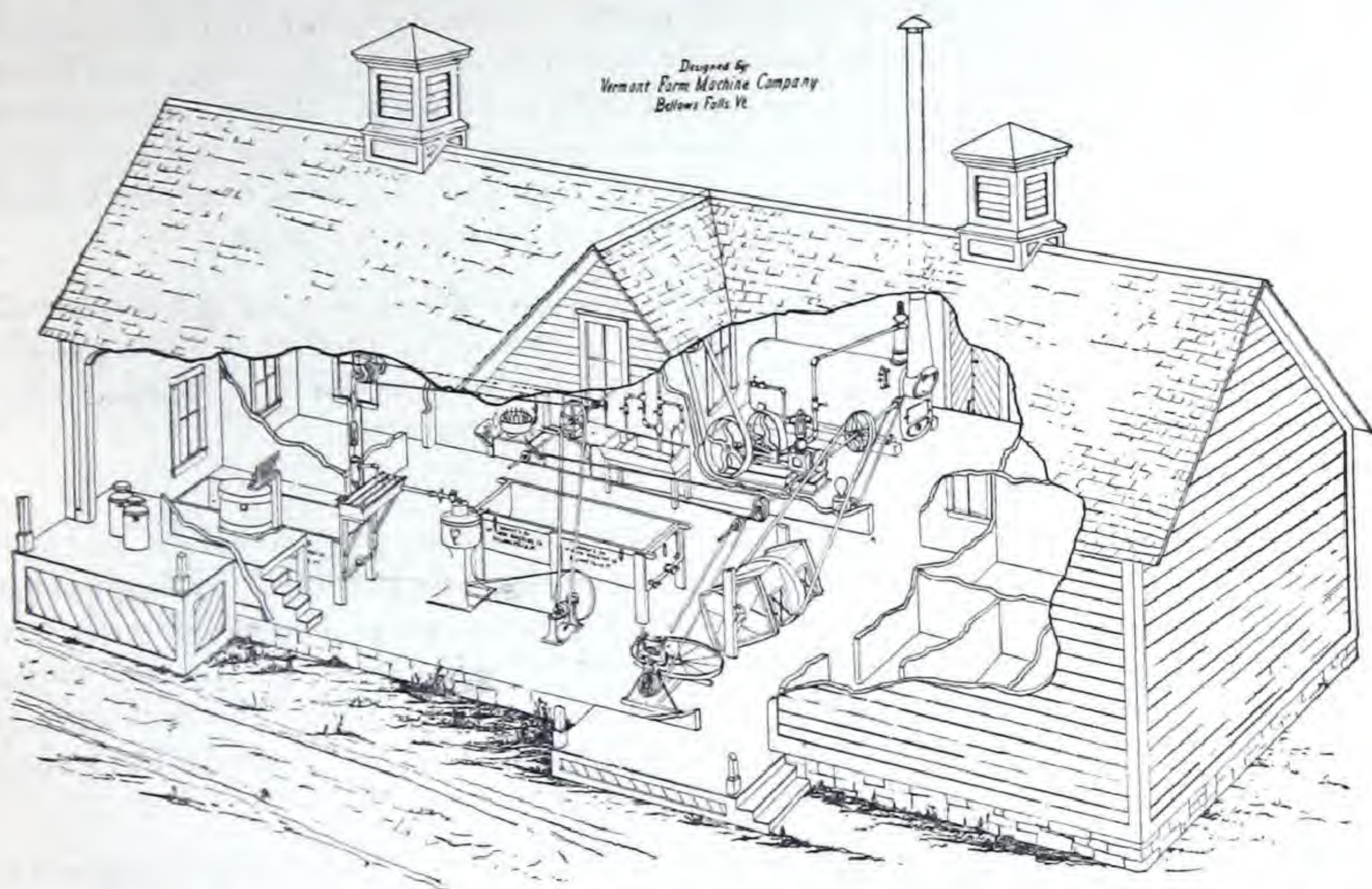
In New Hampshire

At the winter meeting of the State Board of Agriculture, held December 26 and 27, 1895, in connection with the **Granite State Dairymen's Association**, at Lancaster, N. H., there were awarded

**First Prize and Grand Sweepstakes on
Butter made by the U. S. Separator,**

Being won by Samuel T. Noyes, Colebrook, New Hampshire, who uses a dairy size United States Cream Separator in his dairy.

CREAMERY ARCHITECTURE
—AND—
EQUIPMENT
—FOR—
DIFFERENT SYSTEMS.



VERMONT FARM MACHINE CO.,

Manufacturers of and Dealers in

Everything Connected with the Dairy or Creamery.

WRITE FOR FREE CATALOGUES.

BELLOWS FALLS, VT.

NO. 133.

To Prospective Builders of Creameries.



Our Endeavor: It is our aim to furnish a class of goods that will advertise themselves to such an extent that future orders will follow. We always endeavor to do business by such methods that our patrons will not only come to us for future wants, but recommend their friends to come. In this we pursue a course contrary to that of certain firms whose methods have made them notorious and whose schemes have been well advertised by the agricultural press.

Results: By our methods we reap the benefits, first in the consciousness of being engaged in an honest, upright business in which, by reserving for ourselves only a legitimate profit, we are thereby enabled to really do the purchaser actual good because we give him the full value for money expended. Secondly, purchasers once secured continue as our patrons; and thirdly, the plants that we establish remain as actual working examples of what we supply, and are thus the best advertisements that we have. We are not obliged to go into a new section every little while in order to do business, as is the case with the "creamery shark."

Testimonials: In the following pages we have grouped together some testimonials which we have received from a few of the many hundreds of creameries that have followed the Vermont Farm Machine Co.'s method in erecting their creamery plants and equipped the buildings with our apparatus.

Buildings: When desired, we contract to erect the buildings.

We also furnish complete architects' working drawings of our plans to those who purchase their apparatus of us, which will enable a local contractor to go ahead and erect the building at a great saving of time and expense as compared with having creamery contractors come in from a distance to build the plant. It is reasonable to expect that such contractors are going to make a profit on the buildings they erect, therefore a large majority of our patrons have preferred to have their buildings erected by local parties, thus saving the contractor's profit.

Starting an Interest: If the prospects of starting a creamery are good, when requested, we will send, if possible, one of our experienced traveling men to give any further information that may be desired. Any one knowing of contemplated creameries will confer a favor by notifying us.

Dairy Goods: If not interested in creamery apparatus, write us for any thing that you may need for the dairy. We furnish everything for dairy use, and of the same high grade as our creamery apparatus. We are pleased to send special circulars of anything wanted in any department of the dairy or creamery.

Our Plant and its Products: Ours is the largest plant in the world devoted to Creamery and Dairy Supplies. We are ready to furnish anything for use in the Creamery. We are entirely within bounds when we make the statement that we can and do furnish the most complete and satisfactory creamery equipments of any supply house in the world. This is a strong statement, but we will proceed to back it up by the records contained in this pamphlet.

VERMONT FARM MACHINE CO.

BELLOWS FALLS, VT.

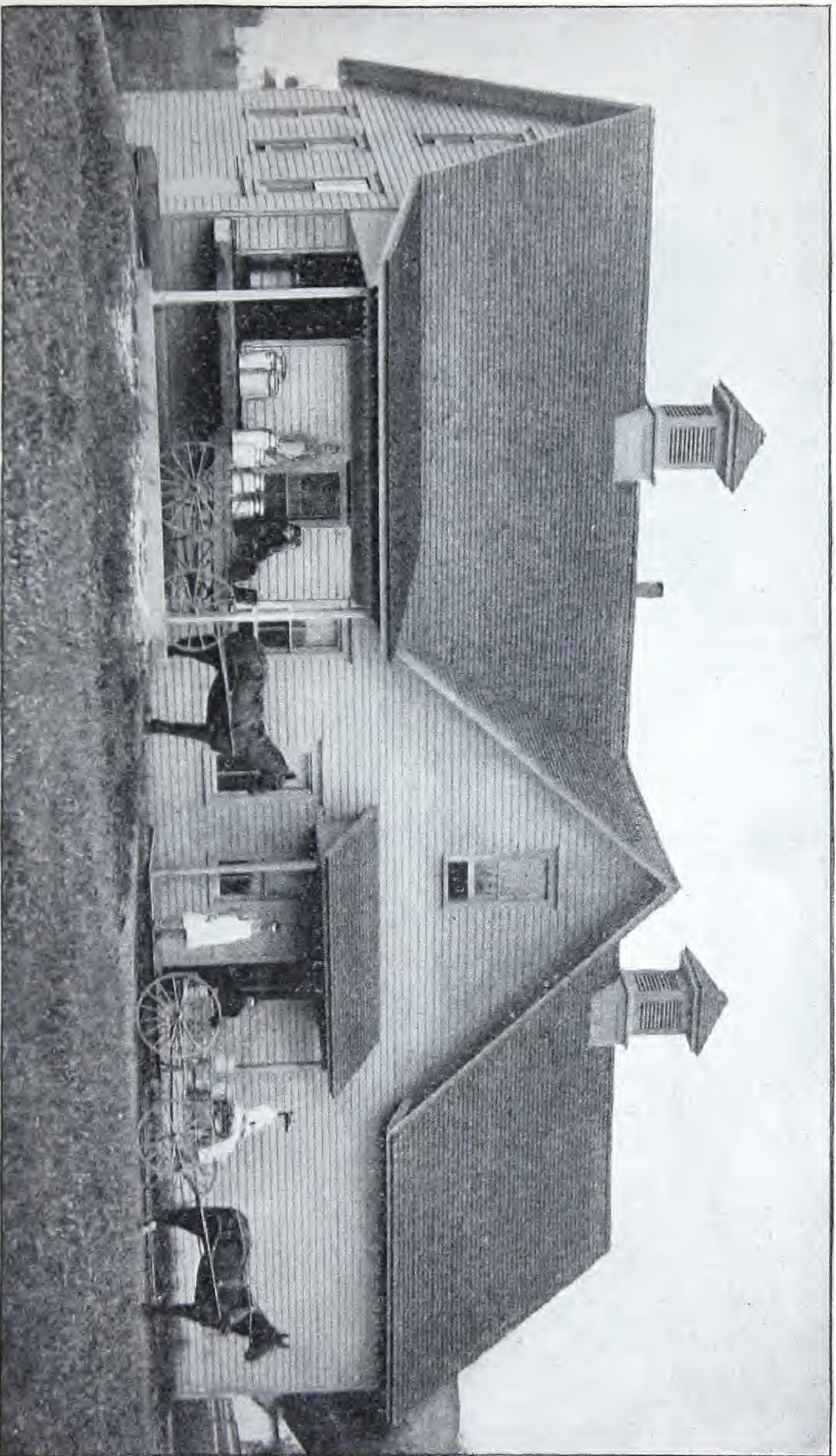


Fig. 1. Erected and Equipped by the Vermont Farm Machine Co.

SILVERDALE CREAMERY, EAST CANTON, PENN.
Cost of Building and Apparatus, Complete, \$3,000.

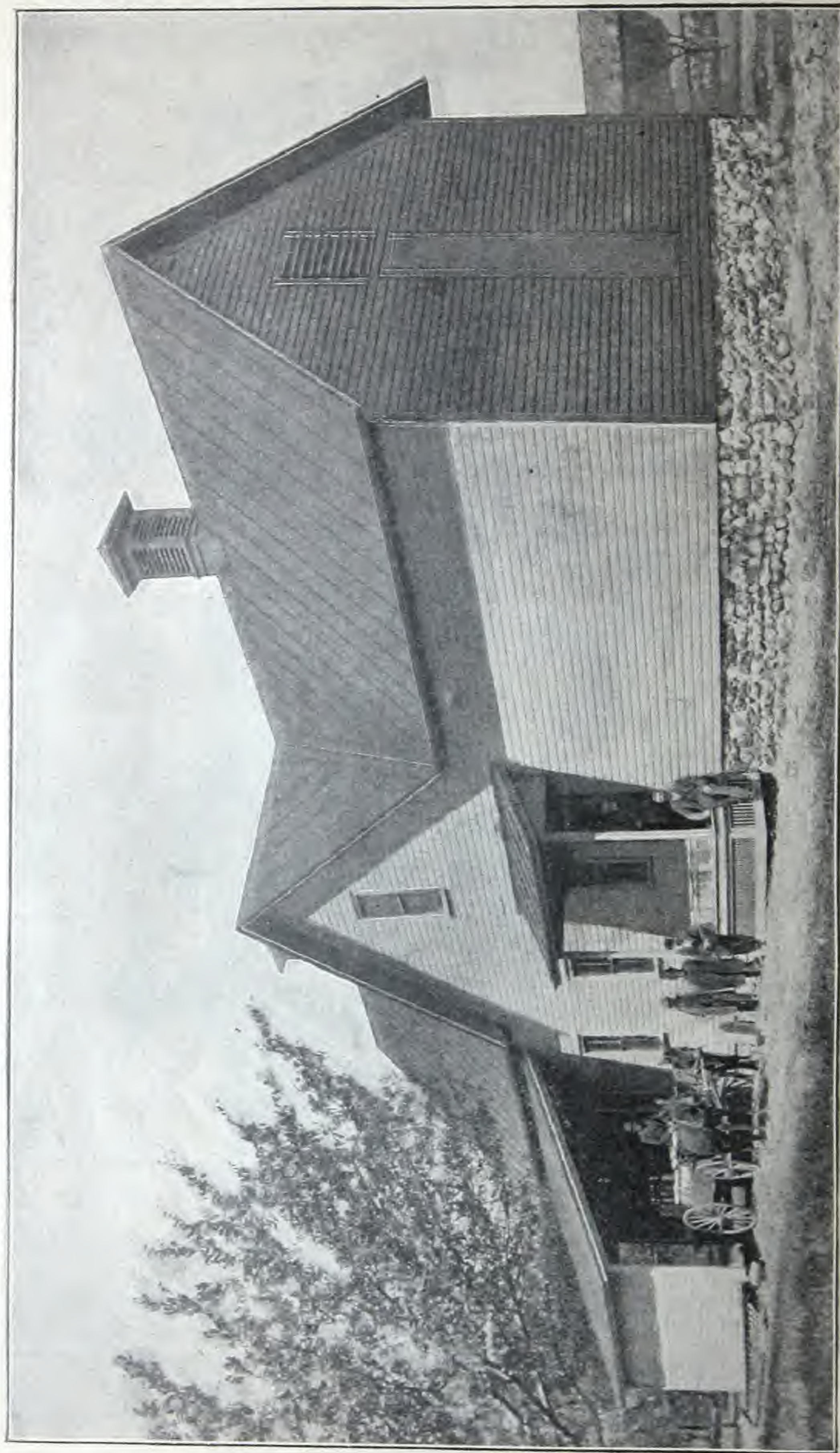


Fig. 2. SODUS CREAMERY, SODUS, N. Y. Cost of Building and Apparatus, Complete, \$3,200.

Erected and Equipped by the Vermont Farm Machine Co.

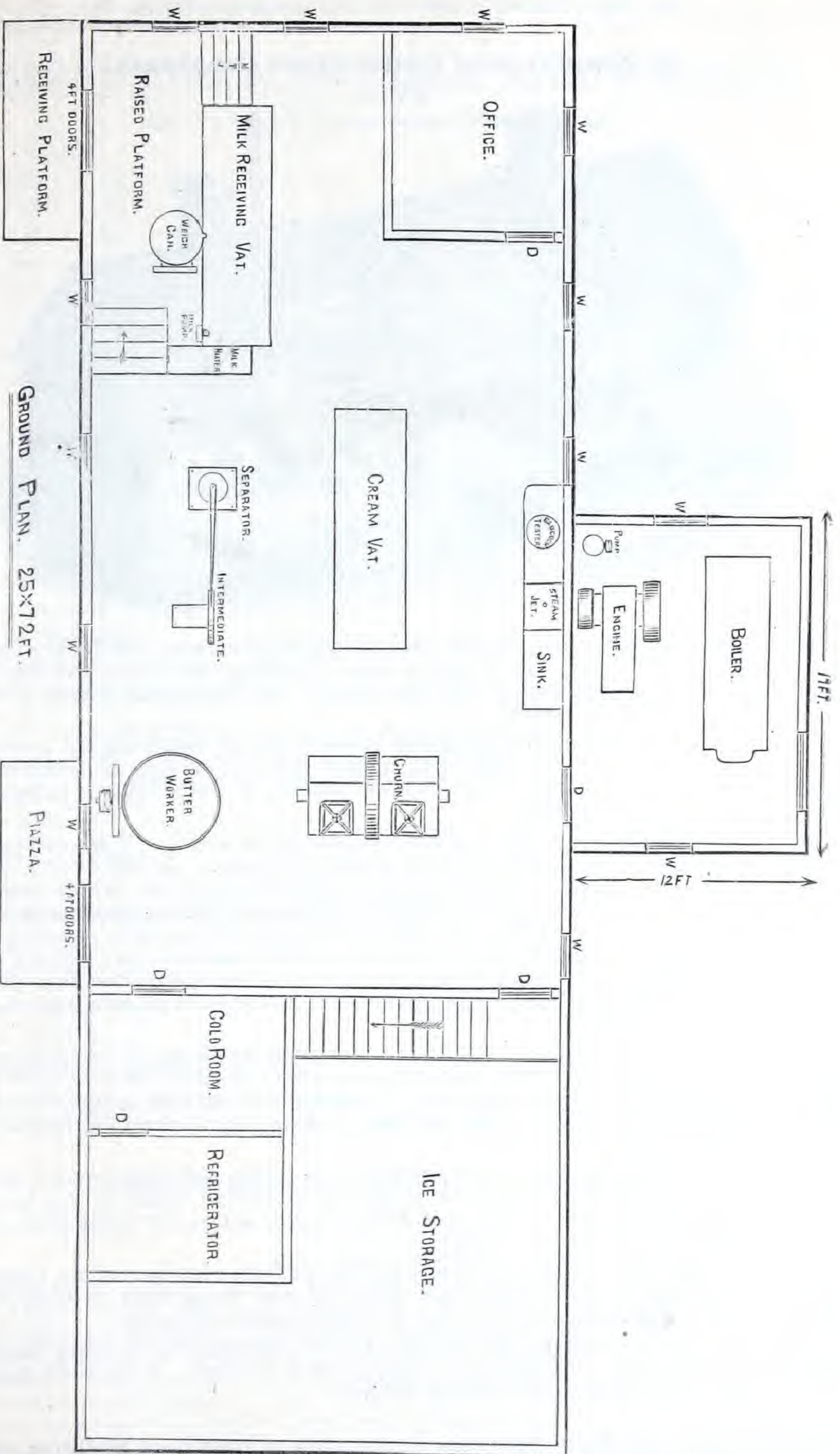
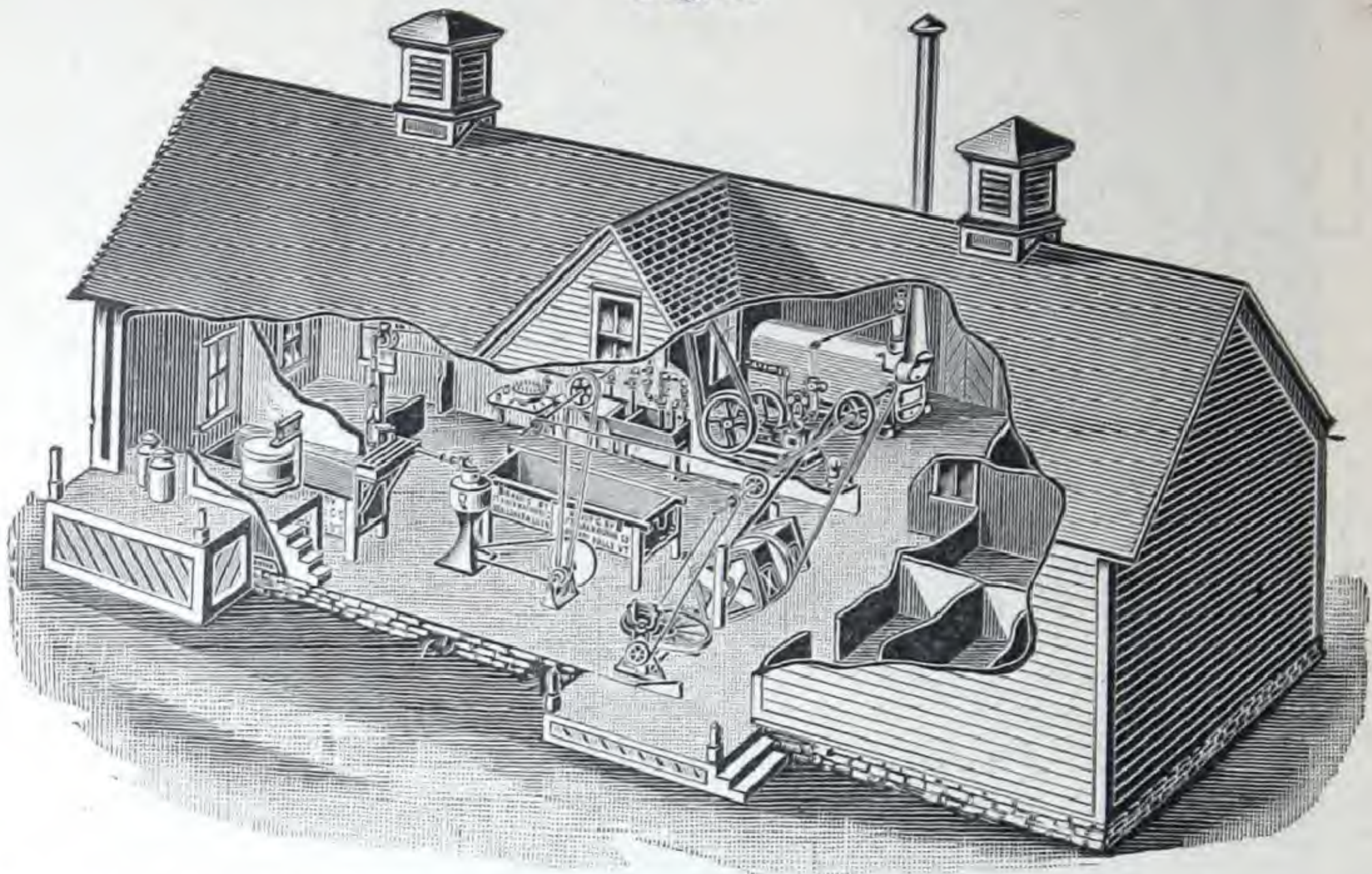


Fig. 3. Ground Plan of Foregoing Creamery Buildings.

A Popular and Convenient Creamery.

Fig. 4.



The illustrations preceding, of Sodus and Silverdale Creameries, which are arranged according to the floor plan, Fig. 3 (shown also by building in above illustration with side broken away), represent a style of building that is popular among practical creamery men and butter makers.

The floors are all on one level except the platform that the weigh can and scales rest on, which is raised three feet above the Creamery floor to discharge the milk from the weigh can to the receiving vat. The platform outside of the building is raised three feet above the level of the sills.

The engine house is represented as a lean-to on the back side. This arrangement removes the heat as far as possible from the Creamery proper. An office of convenient size is located in one corner. The ice-house, refrigerator and cold storage rooms are located at one end of the Creamery building, and for convenience should be under the same roof. A stairway leads from the lower to the upper floors or attic, which is used for storage. This stairway is located between the ice-house and the Creamery work-room, and divides them so as to remove the moisture that accumulates from the ice-house so far from the Creamery proper that there is no danger of its rotting the timbers of the Creamery building.

The cold storage and refrigerator rooms are arranged as illustrated on another page of this catalogue, and also have dead air spaces as described in "How to Build Dead Air Wall." The ice storage room over the refrigerator and cold storage room has a capacity large enough so that it will not be necessary to refill more than half a dozen times during the summer.

The floor in the end of the work-room where the churn and butter worker are set, next to the ice-house, may be lowered three feet, so that the cream will run from the cream vat into the churn. This drop in the floor is not shown in the ground plan (Fig. 3) nor in the sectional view above.

Drains should be so located that water will run off from every part of the Creamery floor into the drains, and these drains connected with living water to carry off the drainage. For construction of drains see description under that head.

There is sufficient room in this building so that another cream vat may be put in, and another Separator, thus giving it a capacity for 1,000 cows. A list of the material required for the erection of this building follows.

We have large working drawings of this plan of Creamery Building which we furnish, without charge, to those who purchase their apparatus of us.

Specifications for Separator Factory.

25 x 72 ft., 14 ft. Studding (12 ft. Ceiling).

2 sills 6x8, 65 ft. long.	Actual Amount Used.	74 pieces, 2x6, 20 ft. long.	Actual Amount Used.
3 " 6x8, 25 "		22 " 2x6, 13 "	
3 " 6x8, 12 "		220 " 2x4, 14 "	
1 " 6x8, 14 "		12 " 2x4, 10 "	
1 " 6x8, 18 "		37 " 1½x8, 14 "	
1 " 6x8, 25 "		4 " 1½x8, 10 "	
3 " 6x6, 12 "		20 " 2x4, 16 "	
12 pieces, 3x8 10 "		12 " 2x4, 11 "	
28 " 2x10, 25 "		18 " 2x6, 10 "	
26 " 2x8, 25 "		4 " 4x4, 10 "	
12 " 2x8, 10 "		2 " 3x6, 12 "	
9 " 2x6, 15 "			
10,600 ft. common boarding ⅞ in. thick, planed one side,	Includes 15% for waste.		Actual amount used.
2,500 ft. 1½ in. matched flooring,			
1,625 ft. ⅞ in. matched flooring,			
4,790 ft. matched ceiling,			
5,500 ft. clapboards,			
24,700 shingles,			
10,500 sq. ft. building paper.		350 ft. 2 in. plank in refrigerator ice-box and rack.	
400 lbs. 8d common nails.		75 lbs. galv. iron in drip pan for ice-box.	
75 lbs. 10d " "		8 lbs. solder " "	
75 lbs. 5d " "		16 window bolts.	
90 lbs. 8d finish " "		7 door knobs.	
150 lbs. 3d common " "		2 mortise locks.	
125 lbs. 40d " "		11 pairs door hinges.	
Door and window, cornice and outside casing, 2,200 ft.		7 door bolts.	
16 14x28 4-light windows.		6 pairs 8 in. strap hinges.	
5 6½x2½ panel doors.		4 gals. shellac in refrigerator room.	
3 pairs 2x7 doors.		18 gals. varnish on inside main room and office.	
2½ bbls. cement in boiler room floor.		25 gals. mixed paint.	

This building has been erected at a cost of \$1,000 to \$1,200, including foundation, the cost varying with the finish, location and cost of material.

TESTIMONIAL SILVERDALE CREAMERY.

See Fig. 1.

Cost Only \$3,000.

It is with much pleasure I can say that, as compared with other creamery plants, we are much pleased with our plant, costing \$3,000.00 for building (including ice house and cold storage) and first-class machinery, amply sufficient to do all the work you claimed for it. Today I asked the president of a Chicago plant costing \$3,950.00, claiming to have the same capacity as our plant, if I could conscientiously say to you that we were pleased with our plant, as compared with the costlier plants about us. Without a moment's hesitation he said, "Yes; if you can't, move it up on our foundation and we can, and pay boot, too."

I will gladly answer any questions any one may wish to ask about our creamery plant.

East Canton, Penn., Jan. 1, 1894.

W. T. LAWRENCE, Sec. Silverdale Creamery Co.

Specifications for Separator Factory.

22x65 ft., 14 ft. Studding (12 ft. Ceiling).

We have large working drawings of this plan of creamery building, which we furnish, without charge, to those who purchase their apparatus of us.

This building has been erected in different places, at a cost varying from \$800 to \$1,000 including foundation, the price varying with the finish, quality of material and location.

The appearance and arrangement of this building are practically the same as previously illustrated in the foregoing figures, the only difference being that this building is three feet narrower and seven feet shorter.

2 sills 6x8,	65 ft. long.	5 2½x6½ panel doors.
3 " 6x8,	22 "	3 pairs 2x7 doors.
3 " 6x8,	12 "	2 cupolas.
1 " 6x8,	10 "	20 gals. mixed paint.
1 " 6x8,	17 "	3 men, six days each, to paint two coats.
1 " 6x6,	41 "	2½ bbls. cement for boiler room floor.
2 " 6x6,	12 "	Labor making cement floor in boiler room,
1 " 6x6,	24 "	(estimated 3 days).
5 " 3x8,	10 "	Labor on refrigerator, ice-box, rack and
42 " 2x8,	22 "	cover, (estimated 6 days).
7 " 2x8,	10 "	Ice drip-pan under rack, 65 lbs. No. 24
37 rafters 2x6,	17 "	galvanized iron.
9 " 2x6,	15 "	Labor making drip pan, 5 hours.
28 collar girts 1½x8,	14 "	6 lbs. solder, nails.
8 " 1½x8,	10 "	2 mortise locks.
163 pieces 2x4,	14 "	11 pairs door hinges.
18 " 2x4,	16 "	11 door knobs.
9 " 2x4,	11 "	6 door bolts.
17 " 2x6,	9 "	12 window bolts.
11,000 ft. common boarding.		6 pairs 4-in. strap hinges.
1,600 ft. matched spruce flooring.		4 gals. shellac in refrigerator, two coats.
6,000 ft. No. 1 spruce sheathing.		Labor shellacing refrigerator, two days.
4,100 ft. No. 1 spruce clapboards.		15 gals. varnish on inside sheathing.
19,000 shingles.		Labor varnishing, 6 days.
2,700 sq. ft. building paper.		112 days' labor of carpenters (estimated).
300 lbs. 8d common cut nails.		10 per cent added to common boarding
50 lbs. 10d " "		for waste, 1,100 ft.
60 lbs. 5d " "		10 per cent added to matched spruce
75 lbs. 8d finish nails.		flooring, for waste, 160 ft.
100 lbs. 3d common nails.		10 per cent added to matched spruce
100 lbs. 40d " "		ceiling for waste, 600 ft.
Door and window casing, cornice and		10 per cent added to 2x4 studding for
outside casing, 1,700 ft.		waste, 150 ft.
12 14x28 windows.		

TESTIMONIAL FROM SODUS CREAMERY.

Built After This Plan. (Shown in Fig. 2.)

"Finest and Best Equipped in the State."

We have now had an opportunity to test the machinery furnished by you.

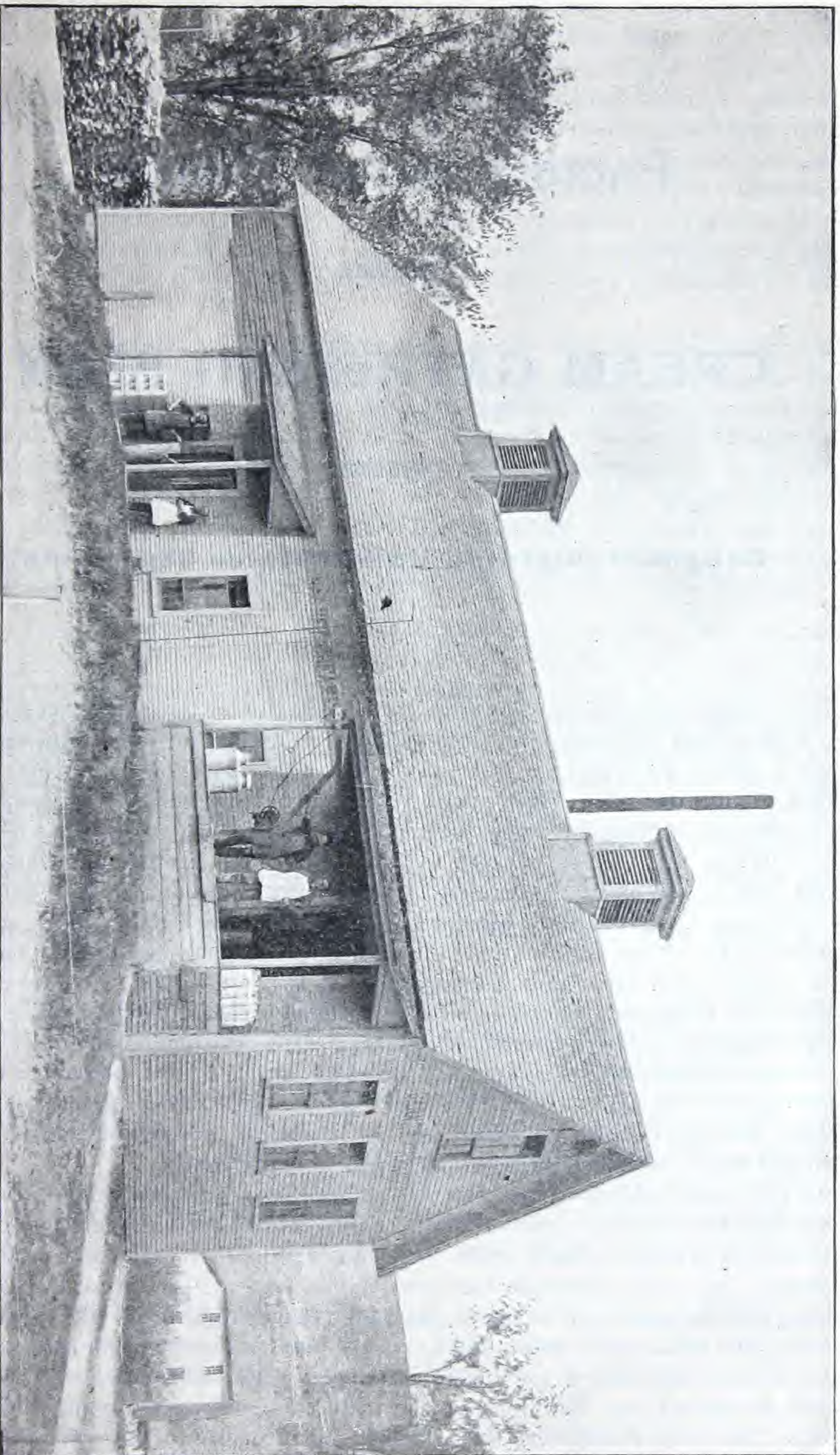
The longer we run the U. S. No. 1 Cream Separator, the better we like it, and would recommend it as being the simplest and easiest machine to operate and clean that there is on the market, and one that requires little or no attention while running. Frequent tests of the skimmed milk show from a trace to two pin heads of butter fat only left, when the Separator is skimming at the rate of 2,200 to 2,300 lbs. per hour.

The other tools and machinery give the best of satisfaction, and all the stockholders are agreed that we have the finest and best equipped factory in New York State, and we were not compelled to pay an exorbitant sum for it.

We would recommend all prospective creameries to confer with the Vermont Farm Machine Company before placing their order.

Sodus, N. Y., June 10, 1895.

SODUS CO-OPERATIVE CREAMERY,
PETER LANGWILL, Sec.



Equipped by the
Vermont Farm Machine Co.

Fig. 5. BARNET CREAMERY, BARNET, VT. Run on the Cream Gathering
and Whole Milk Systems Combined.

Factory Butter Making

ON THE

CREAM GATHERING PLAN

WITH

Dairy Size Improved United States Separators.

It is a matter of history that the creameries conducted on the Cooley cream gathering system have been the most successful on an average of any creameries in the country, paying the largest net profits to the dairymen. This history extends over a period of from twelve to fifteen years, showing that the system has not had a mushroom existence but that it is established on a firm business basis. In many places the cold water or ice that are required to run the Cooley system are not convenient of access, and in such places the Improved United States Separators are used at the individual dairies, the cream being separated from the milk immediately as soon as drawn from the cows. The cream is cared for as carefully as the milk has to be in the whole milk system, until the cream gatherer takes it to the creamery. We have recommended this system ever since we have manufactured Cream Separators, and the farmers are beginning now to appreciate it and many of the whole milk factories where the patrons are considerably scattered are changing to this system, and others are contemplating it. We believe the successful factory of the future for many sections will still be the cream gathering factory, and we earnestly recommend this plan to the dairymen who think of combining or patronizing a butter factory.

We call special attention to the fact that we offer plans for buildings and equipments, and furnish the very best apparatus on the market for any one of three plans, as seems best adapted to meet the needs or the preference of a locality. The first is the Cream Gathering Plan, using dairy size Improved United States Separators at the individual dairies, and the cream only being carried to the factory to be made into butter. The second is the whole milk system, where the milk is carried to the factory and the separating done by the factory size Improved United States Separator, which is unsurpassed for factory use. The third is the addition to the second plan, of skimming stations (described elsewhere in this pamphlet and plans shown) to which the milk is brought by patrons living adjacent to it, and only the cream is sent in to the main creamery from the skimming station.

Let us look at some of the advantages of the cream gathering plan. First, the separation of the cream from the milk is made at home, and the skimmed milk is left on the farm in a sweet and wholesome condition for feeding or other uses. It is well understood that skim milk has a considerable value for feeding and fertilizing purposes, and this value is greatly enhanced by having it sweet and ready to feed while warm, instead of cold, and possibly sour after its trip to the creamery and back. Dairymen are realizing more than ever that they must utilize every part of the product in order to make money in their dairies. The thoroughness of separation is as good or better than obtained at the creamery, from the fact that the milk is separated at once after being drawn from the cows, which is the most favorable time to separate for the best results.

In this same connection, another great advantage, and one only lately recognized, is the saving in the risk of the transmission of diseases from one herd to another. The Cattle Commissioners of the State of Vermont reported at the Vermont Dairymen's Convention that they had traced tuberculosis to herds where it was carried by the skimmed milk that the patrons of creameries had brought home, the creameries having been patronized by farmers whose herds were infected. The skim milk brought from the creamery being drunk by the calves caused them to contract the disease, and thus it was spread to the different herds. Warning was given by the Commissioners of this liability of carrying the disease from one infected herd to all others in the creamery.

A very important item of economy is the saving in transportation. The whole milk system requires the time of a man and team from one to four hours every day in going to and from the factory, including the wait at the factory for those who are ahead and for the milk to be separated. Some argue that this is a pleasure much of the time as they meet their brother farmers at the factory, etc., etc., which may be true, but it is also true that the pleasure ends here, and it is not so enjoyable to return home with the realization of the fact that the work must be taken up just where it was left before starting for the factory. This much of the day is gone, the time consumed in going and coming, and at the factory, being practically lost. In these days when farm labor at reasonable prices is so hard to obtain, every item saved in this direction is a great boon to the farmer. If the milk is hired carried there is that much cash outlay to reduce the returns from the product.

With cream gathering it is different. One man can gather the cream from a very large section, as only about one-eighth of the bulk has to be carried as compared with the whole milk, and then in carrying the whole milk, the skimmed milk has got to be carried back again, making a load both ways. And while it is true that the gatherer has to be paid also in this instance, yet it is as nothing in comparison as one man is practically doing the work of five to ten men who would be required in transporting the amount of whole milk that would be required to produce the same quantity of cream. For instance, where eight men with teams would be required to carry the whole milk, the cream from this amount of milk would be easily handled by one man with a team.

The cost of the Separator for home use will doubtless be the bugbear for a good many farmers, but just stop to figure a little. First, deduct the amount that will be saved from not having to purchase transportation cans. Then estimate carefully the cash value of the time consumed by man and team and the wear and tear incident upon carrying the milk to the factory. Do not be deceived into thinking that because you pay only a small sum per day, either in time of yourself and team, or in money, that it costs little or nothing. Suppose it averages $2\frac{1}{2}$ hours per day for your team

and yourself or man. Would you be willing to furnish team and man for less than 25 cents per hour?

For 2½ hours at 25 cents per hour is, per day.....	\$ 0.63
For a week this amounts to.....	4.41
For a month this amounts to.....	18.90
For six months this amounts to.....	113.40
For a year this amounts to.....	226.80

Suppose someone says the team and man are not worth but half as much, or 12½ cents per hour. Even then see what an enormous expense it is—\$113.40 per year, or more than the cost of a United States Separator of average capacity. How long would it be before the Separator would be paid for? Then take into consideration the fact that in carrying the milk this expense has to continue year after year.

The saving in the factory is also great. The amount of machinery there is lessened, reducing cost of building and equipment. Less help is required to handle the product, as no separator has to be run at the creamery. Those favoring the whole milk system will argue that the butter will not be as good in the cream gathering system, but this argument is not well founded. In a very large proportion of the creameries the milk is carried but once a day, and especially in cold weather the milk is often carried only every other day, and in some instances but twice a week. Of course this milk must be cared for at the dairy, and every thinking person can readily see that it is very much easier for a dairyman to care for the cream, which is on an average only one-eighth of the bulk of the entire milk, than to care for the entire milk. Therefore this argument that the butter is not as good when the cream is separated at home is not true, but the reverse is true. It would be in favor of separating the cream at home, because of the less labor required to care for the cream, keeping it in more perfect condition than the large body of milk can be kept. For proof of this we refer to those creameries that have run on the cream gathering system successfully for twelve to fifteen years, paying their patrons more than any whole milk factories in the country; and those that have not succeeded are those that have not run according to rules, but on hap-hazard methods for the purpose, perhaps, of getting a large quantity rather than a fine quality, and have not made the patrons live up to the rules for fear of losing their patronage. Anyone can see this is a very unwise plan to pursue. As a matter of fact, where rules are made and lived up to, the entire operation of making the butter on the cream gathering plan is even more fully in the hands of the expert butter maker at the factory than in handling the whole milk.

A Successful Cream Gathering Factory Appreciates our Apparatus.

Perhaps the best evidence of the satisfaction your creamery supplies have given us in our fourteen or fifteen years' use is the fact that we have never had any reason to look for anything better; our work being performed smoothly and with few repairs.

I made no mistake when I purchased one of your 30 bottle Babcock Testers with Steam Turbine. I find your tester runs easy and true, and a speed of 800 revolutions is readily acquired with 15 pounds of steam. A trial showed the tester would run twelve minutes after steam was turned off.

The general merit of your apparatus was recognized by us long ago, and we continue to appreciate the results of your close study and good workmanship.

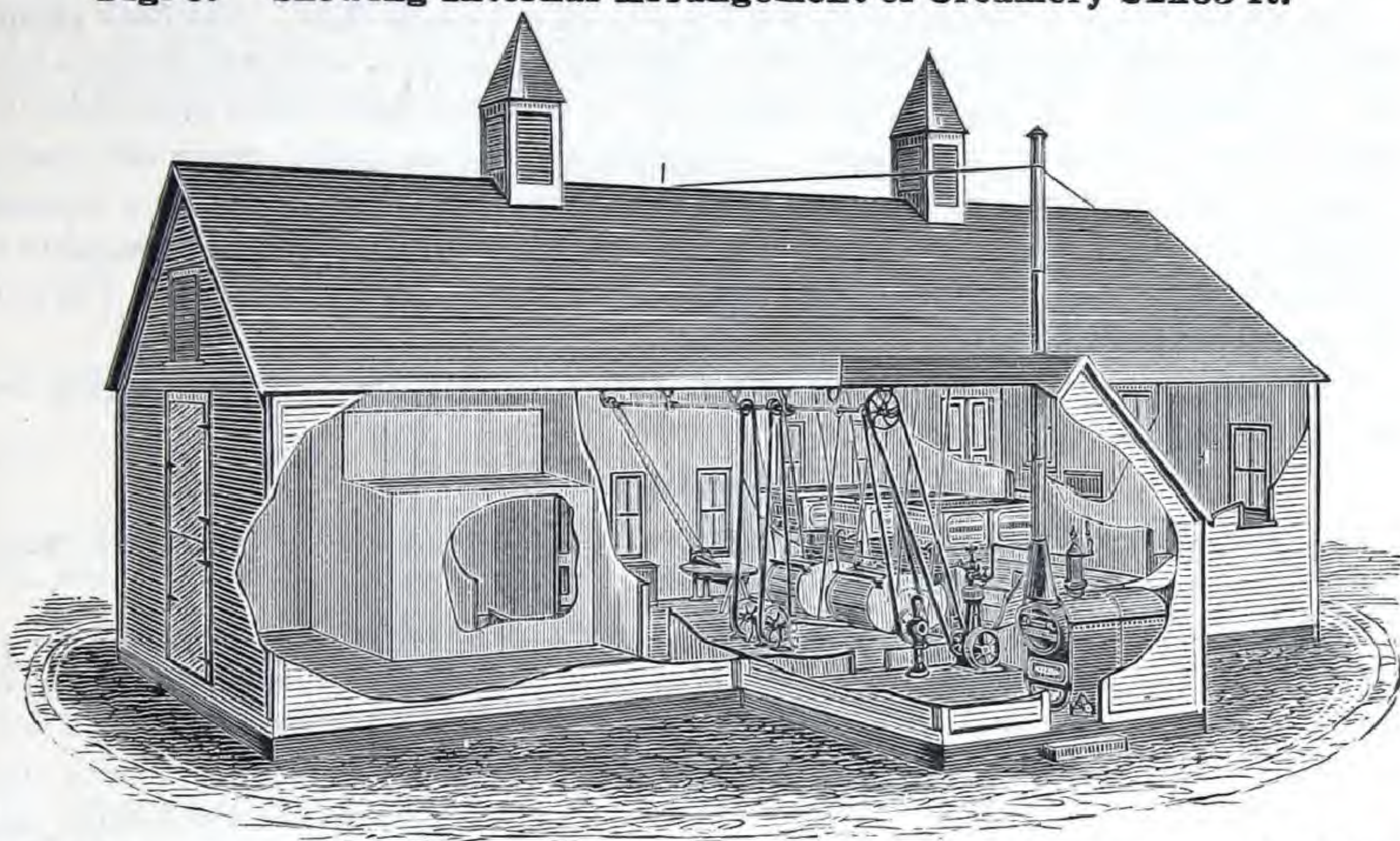
Canton Center, Conn., Nov. 20, 1894.

BENJ. F. CASE,
Treas. and Manager Canton Creamery Assn.

A Cream Gathering Factory.

Immediately following is shown a sectional view of a creamery 22x65 ft., conveniently arranged for the cream gathering system, with full description and specifications for erecting. Fig. 7 shows a ground plan for a slightly larger building, the size being 25x65, but otherwise the floor plan in Fig. 7 is the floor plan for this sectional illustration.

Fig. 6. Showing Internal Arrangement of Creamery 22x65 ft.



This Creamery building is divided into seven rooms. Receiving-room 10x17 feet inside, is used also for a wash room. The outside door should be four feet wide and double, and open on to a platform 4x10 feet that has a roof for shade. The earth is graded toward this platform so that a truck can be run out on a level with the wagon body, and the cream cans set on and run into the receiving room, and the contents poured into the cream-strainer and conveyed to the cream vats through troughs. The floor should slant to the drain one-fourth inch to a foot, and this drain be connected outside of creamery with main drain from creamery. Iron pipe should be used for a drain, not less than three inches in diameter.

The cream-receiver should be 6 inches deep, 17 inches wide, and 29 inches long, inside and the top should be 2 ft. above the floor; it should be lined with good tin, with collar, 3 inches in diameter extending through the partition to cream-room, to which is attached a trough to conduct cream to vats. The receiving room should have a sink for washing gathering cans and gathering pails, and a jet for steaming the same.

The office, 8x10 feet inside, and the floor may be on a level with the receiving room floor or the cream room floor.

The cream room is 12x20½ feet inside. It is better partitioned off from the work-room, but in case it is not, the drain marked under the cream vats may be omitted. The floor slants to drain one-fourth inch per foot, and is 3 feet above sills.

The work room is 18x20½ feet inside. The floor is on a level with sills and slants to the drain one-fourth inch to the foot. This room contains the churns, butter-worker, butter-printer, etc. It has double doors, 4 feet wide, leading to platform, and sash door leading to the engine room. There is a platform 3x10 feet at the outside door that is used as a delivery platform. It has a roof that serves as a shade to the door

and window. The ice-house is $20\frac{1}{2} \times 22\frac{1}{4}$ feet inside, including the cold storage rooms. Instructions for building ice-houses are given under that head elsewhere.

The cool room is $5\frac{1}{2} \times 9\frac{3}{4}$ feet, and is used for storing the butter after the first working; after the second working it is put in the refrigerator. These cool rooms may be made larger to suit the requirements of the business.

By regulators put in the draft flues the temperature of this cool room and refrigerator may be varied to suit the nature of the work required. Instructions for making the cold storage are given under heading "Cold Storage."

The engine house is $10\frac{1}{2} \times 15$ feet, and has a brick or cement floor. The floor should be on a level with work room floor, and in case the creamery is heated by steam a trap will be necessary. If the engine room floor is four feet below work room floor, no traps will be required in steam pipes. It contains the engine, boiler, pump (if running water is used no pump is necessary), and coal bin, or it is better to have a separate room for the coal. The posts are 14 feet and the roof is a half pitch with the gable to the main creamery building, or it may be built as a lean-to with 12 ft. posts. The outside door should be double and four feet wide.

A storage room or basement may be put under the receiving room by digging two feet in the earth.

Material and Kind of Floors.

Every Creamery should have a first-class cement floor in the churn and work room, and, if convenient, in the cream vat room also.

To Make a Thorough Cement Floor.—Fill in first with small cobble or broken stone, then put on dry sand and pour on water to wash the sand thoroughly and firmly in among the stones, so that they will all be solidly imbedded; then puddle on a mixture of common cement and sand, half and half; on top of this spread a thick coat from $1\frac{1}{2}$ to 2 inches thick of Portland cement and fine sand, mixed half and half. Let it get thoroughly hard before using and you have a perfect floor. We advise that all creameries have cement floors, but they must be good ones. A good wood floor is better than a cheap cement floor, hence if you cannot afford a first-class Portland cement floor, put in a good wood floor, $1\frac{1}{2}$ or 2 inches thick, firmly laid and well spiked to prevent it from bulging or "huffing up" when it swells from being wet.

Manner of Building.

The Creamery is built in the following manner:

Sills 6x8 on brick or stone foundation. The wall on the front side for a length of 24 feet is raised three feet higher than under the rest of the building, so that it may be graded up to raise the cream wagons on a level with the receiving platform. Joists for elevated floor 2x8, spiked to studs and supported in the center by 4x6 timbers shored up on pillars. Ends shored up by 2x4 studs. Outside walls 2x4 studs, 14 feet long. On outside of studs nail rough, one-inch boards; paper with building paper. Fur on with one-inch strips, and side with drop or patent siding or clap-boards. On inside of studs nail on rough boards, cover with paper; fur out with inch strips, and ceil with seasoned sheathing.

This leaves three air spaces. In case it is desired to save the expense of rough boarding, tack the paper to the studs and fur out one inch, then ceil and side as above. For partitions ceil on studs set flatways, on both sides of studs, leaving two-inch air space.

The inside walls and ceilings should be oiled and shellaced to make a good finish, and the floor, if made of boards, should be thoroughly oiled before it is used.

The outside should be thoroughly and tastily painted.

Time and Cost.

It will require labor equal to four men's work for 28 days to complete this building.

The lumber bill includes everything required, except for cupolas.

The above creamery has been put up for \$750. In some places it will cost less, and in places where lumber and labor are high may cost more.

The list of machinery we give will be found very complete, for the capacity stated. Many creameries prefer to put in only two vats and one churn and a hand worker, to start with, and add these other helps, such as a power worker, more vats and a churn, as their business requires.

It will be seen that the building and engine should be as large at first as will be required when the creamery has reached its full growth and the flush of the season.

Specifications for Creamery 22x65 Feet.

Sills,	2 pieces 6x8, 65 ft. long.	Flooring, 250 ft. 1-in. No. 1 clear spruce,
"	2 " 6x8, 22 "	12 ft. long, matched.
"	3 " 6x8, 12 "	Flooring, 850 ft. 2x6-in. hard pine, 12 ft.
"	1 " 6x8, 11 "	long.
"	1 " 6x8, 15 "	Flooring, up stairs, 1,050 ft. 1-in. cheap
Cross Timbers,	5 " 6x8, 22 "	grade spruce, 12 ft. long, matched.
"	1 " 6x8, 10 "	Clapboarding, 4,100 ft.; if drop-siding is
Shore	1 " 6x8, 18 "	preferred, 3,350 ft.
"	1 " 6x6, 12 "	Building paper, 5,300 sq. ft.
"	1 " 6x6, 11 "	Ceiling, 4,700 ft. No. 1 clear spruce,
Floor Joist,	58 " 2x6, 22 "	matched and beaded.
"	7 " 2x8, 10 "	Sheathing, 1,300 ft. No. 2 spruce,
"	6 " 3x8, 12 "	matched.
Rafters,	68 " 2x6, 17 "	Furring, 225 pieces, 2x1-in., 14 ft. long,
"	2 " 2x8, 18 "	hemlock.
"	16 " 2x6, 12 "	Shingles, 19,000.
Collar Girts,	34 " 1½x6, 12 "	Nails, 300 lbs. 8d common.
Studding,	4 " 4x4, 14 "	" 50 lbs. 10d "
"	275 " 2x4, 14 "	" 60 lbs. 5d "
Boarding, 6,800 ft. 1-in. hemlock, 12 ft. long.		" 75 lbs. 8d finish.
Flooring, 650 ft. 1-in. lining, hemlock, 10 ft. long.		" 100 lbs. 3d common.
Flooring, 250 ft. 1-in. lining, hemlock, 12 ft. long.		" 100 lbs. 40d "
Flooring, 650 ft. 1-in. No. 1 clear spruce, 10 ft. long, matched.		Door and window casing, cornice and out-
		side casing, 1,700 ft.
		12 14x28 windows, glazed.
		6 2 ft. 6 in. x 6 ft. 6 in. inside doors.
		6 2 ft. x 7 ft. outside doors.

Material for Two Piazzas.

Sills, 2 pieces 6x6, 11 ft. long.	Posts, 4 pieces, 4x4, 8 ft. long.
" 5 " 6x6, 12 "	Roofs and floors, 200 ft. No. 1 seasoned
Plates, 2 pieces 5x5, 11 ft. long.	spruce, 12 ft. long, matched, finished.
Rafters, 4 " 2x4, 12 "	

We have large working drawings of this plan of Creamery Building, which we furnish, without charge, to those who purchase their apparatus of us.

Wider Buildings.

In many places the creamery, 22x65 feet described in the foregoing, is large enough, but where there is a prospect of quite a large business, the size, 25x65, had better be used, a ground plan of which follows. The only difference in the two buildings is that one is three feet wider than the other, and materials will have to be ordered for a building that much larger, as the list here given is for the building 22x65 ft.

The list of creamery machinery, pipe and fittings would be practically the same for either building.

To enlarge the capacity of the creamery, add to the width of the main building. The raised floors are constructed for convenience in handling cream. The cream is

taken into the receiving room and strained and carried into vats through conductor pipes, also from vats to churns through conductor pipes, saving all lifting of cream in cans, rendering it possible for one man to do one-half more work than in a creamery without raised floors. This refers to creameries on the cream gathering plan, where the cream only is handled.

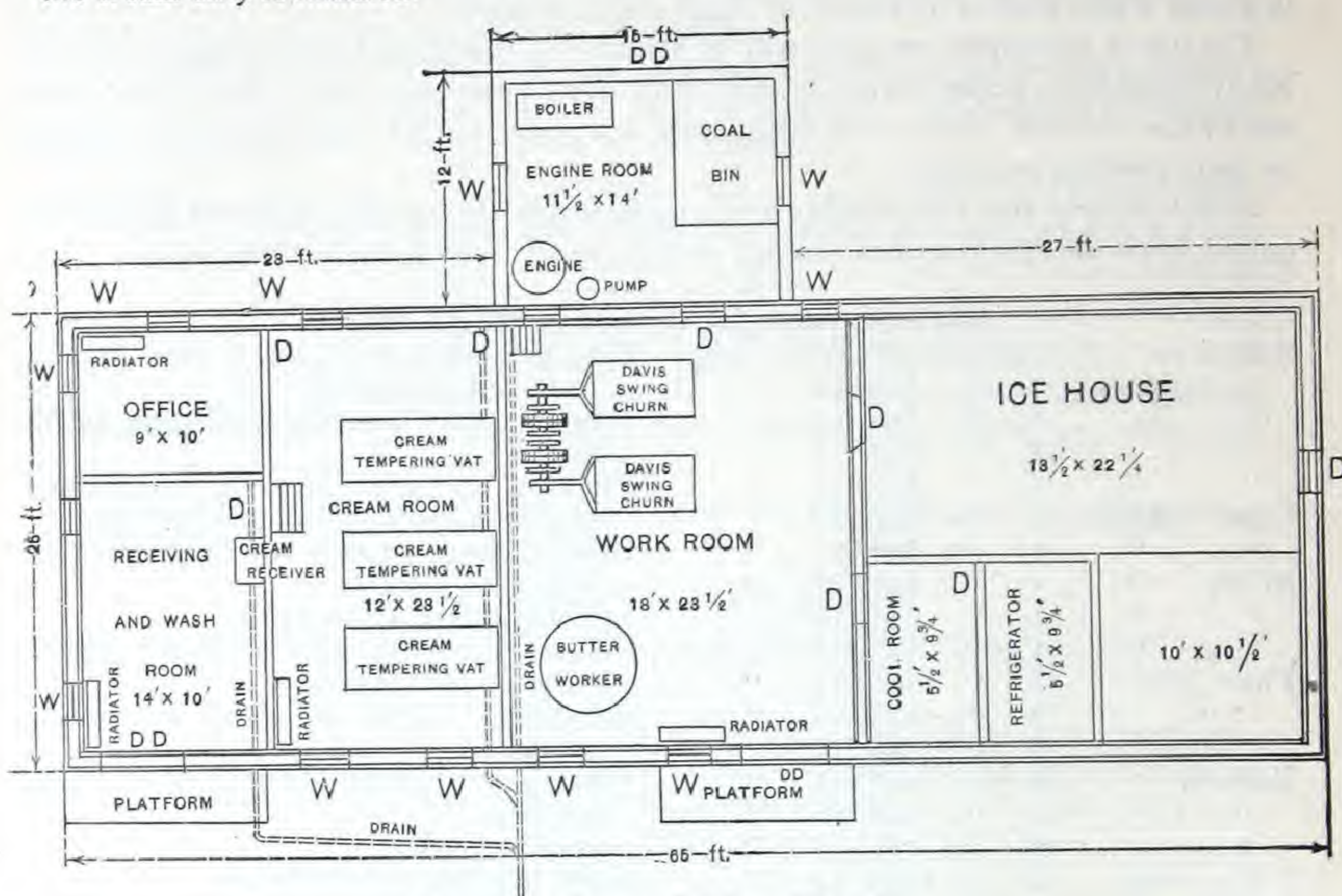


Fig. 7. Ground Plan 25x65.

Drains.

The drawing below represents the manner of constructing the drains, and the position they occupy. The drains should be of galvanized iron or copper. They run the full

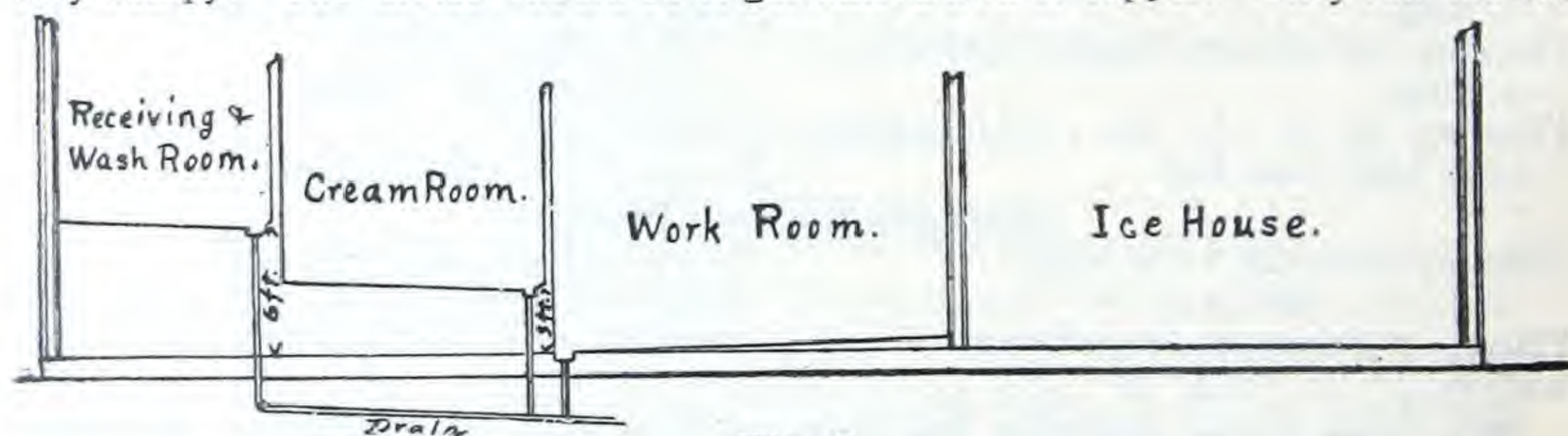


Fig. 8.

width of the building, and are connected under the floor or on the outside, and are continued in a cast-iron drain pipe or a glazed tile of not less than 3 inches in diameter. This drain must have a trap in it to prevent any air returning from the drain.

Construction of Ice-House.

The ice-house occupies twenty-three feet of one end of the main building. Of this space, 10x11 feet have been partitioned off for the cool room and refrigerator. The construction of the outside walls of the ice-house has already been described in the construction of the main building. The inside walls are sheathed up to the upper floor joists, above which the space is left open for ventilating purposes.

The bottom of ice-house is arranged to give good drainage, so that the "drip" from the ice is carried outside the building. The ice may be piled within eight to twelve inches of the walls and this space filled with sawdust or other suitable packing. On top of the ice put a foot of sawdust, or if meadow-hay or straw is used, put on two feet.

General Details in Construction of Creameries.

Doors. In all creamery buildings the doors in the receiving room should not be less than five feet in width, and the better plan is to make them double doors, each one three feet wide, making an opening of six feet, allowing plenty of room for handling the cans and dumping and weighing the milk. The doors leading into the workroom from the outside should be four feet wide, giving plenty of room to handle the butter when carrying it out to load, also in order to make them large enough for the vats, churn and other machinery to be carried in. It is preferable to make the outside doors to the boiler and engine room four feet wide, and window sash put in so that the boiler and engine can be seen without opening the door and letting in heat.

Windows. All windows should be of four lights, 14x28 or 30 glass. In fitting windows and doors in creameries care should be taken that they are not fitted too tight. Because of the large amount of moisture in creameries, the windows and doors will swell in a short time, and if they are fitted as in dwelling houses, would become so tight that they cannot be moved. The windows should be arranged so as to drop from the top as well as raise from the bottom, thus insuring a means for good ventilation.

Ventilators. The creamery building should be provided with ventilators on the top of the roof with passages connecting with the rooms below, so as to carry off as much heat in summer as possible, and steam and moisture at all seasons of the year.

Chimneys. We recommend, instead of ordinary iron smokestack, that a strong substantial chimney be erected of brick in the creamery building. This chimney should be not less than 16 inches square on the inside, and not less than 30 or 35 feet in height to insure good draft. It should in all cases run at least 10 feet above the highest point of the creamery roof.

Separator Foundation. It is desirable to have a good foundation for the cream separator. It is not necessary to build up a foundation of brick or stone for the Improved United States Separator. A good solid floor foundation will be sufficient. It should, however, be solid enough so that the motion of machinery will not cause the floor to vibrate, and so that it cannot be shaken by people walking around on it.

Engine Foundation. We recommend in all cases a horizontal engine and a horizontal boiler. The best foundation for the engine is to dig into the ground below the frost line and lay in stone, securing, in the stone work so laid, bolts with large heads at the lower end. This stone work should be laid in cement and on top of it lay heavy timbers and bolt them securely to the stone work by means of the bolts above described. Care should be taken that the surface of these timbers be level and smooth. The engine can be bolted to these timbers with lag screws. When large, heavy flat stones can be obtained it is more desirable to use these in place of the timbers to bolt the engine to. When Locomotive, Excelsior or Vertical style of boiler is used no special foundation is usually required, but when boilers set in brick work are to be used it is necessary to go down below the frost line and lay in stone work with cement and secure a foundation that will not move. We recommend that the floor of the engine room be made of cement, and then on the sides of the room sheet iron be nailed to make it secure against fire.

Drains.

There is no part of a creamery that requires more careful attention than its drainage. The creamery should be located not too far from a living stream of water that is of sufficient size to carry off all the washings from the creamery, so that they may not be allowed to accumulate on the surrounding ground and create a nuisance. From the creamery building to the running stream of water should be laid a pipe, preferably constructed of cast iron, but if this is considered too expensive, then ordinary glazed tile will answer to very good purpose.

When a cement floor is used the floor should slant from all directions to one point and at this point a trap should be placed so that the water will run into it and not leak around the outside. This point of drainage should be so located in the creamery as to be of easy access. Where creameries are built with wood floors it is better to use a gutter set into the floor for the drain. This is best constructed by placing two floor joists about four inches apart and let them run the full length or width of the building as the drain is designed to extend. Have the floor slant towards these joists $\frac{1}{4}$ inch to the foot, leaving the space between the two joists for the drain or gutter. Rabbit down into the ends of the flooring $\frac{1}{2}$ inch on each side and paint it with white lead; then lay in a coating of putty and form the gutter of galvanized iron or preferably copper, so that it will set down in between the joists and turn over where the floors are rabbitted and nail it into the floor, driving the nails close together; then give it another coat of white lead and putty again, allowing the whole to become thoroughly dry. This galvanized iron or copper gutter should slant towards one point $\frac{1}{4}$ inch to the foot, and from this point be connected with the sewer, being particular that there is a good trap in the sewer pipe.

Floors.

We recommend, where it is practical, that a good cement floor be put into a creamery, provided the work is properly done and proper material is used. Nothing but the best Portland cement should be used to make the cement floor, and a man should be employed who understands his business.

The best cement floors are constructed by filling in with finely broken stone to a depth of not less than six inches and the whole of it pounded down solid and smooth. Then mix cement and sand together of the proper proportions to a consistency that will flow freely and pour over this broken stone, allowing it to run down into all the crevices and to partially dry, and then put on a sufficient number of coatings of cement above this and make a smooth surface, covering up all the stones that project above.

If a good cement floor cannot be obtained, a wood floor is most desirable, and should be made $1\frac{1}{4}$ or $1\frac{1}{2}$ inches thick and be single. A double floor in a creamery accumulates the moisture and soon rots out. The best material used for flooring is good Georgia hard pine. When this cannot be obtained ordinary pine answers very well. In laying this floor the tongue and grooves should be well coated with white lead when the floor is put down, so as to make it as near water tight as possible.

Refrigerator Style of Buildings. This style of building differs from those previously described only in construction of the outside of the building. The walls are constructed as described under "Plan for Ice House," Figs. 36 and 37, in paragraph headed "How to Make Dead Air Walls."

The plan of protection there described makes a wall that will withstand the heat and also the cold better than any other plan that we have ever tried, and wherever it is in use gives the best of satisfaction. To make it still more effective, add the paper on the inside as instructed above, and cover it with boards; then fur out, using $2 \times \frac{7}{8}$ -inch

pieces on the studs, then add another thickness of paper and sheathe up tight with matched boards. The windows should be double and arranged for a double sash. All the doors should be double, with dead air spaces between.

By following these directions any carpenter will be able to make a first-class refrigerator building.

Finish. The outside of the creamery building should be well and tastily painted. It is better to shellac the inside of the building than to paint it, and it will require several coats of shellac in order to make a good surface, but it makes a surface when finished that does not absorb odors and is easily washed clean. Do not attempt to hurry this part of the building too rapidly. Take time enough before setting up the apparatus and see that the creamery is well painted and shellaced.

Especial care should be used in shellacing the cold storage room; see that it is well done. It will take but a very few days for the odors of the shellac to escape so that it will not injure the product of the creamery.

Pipe Fitting and Plumbing. There is no part of the equipment of the creamery that requires more careful attention than the steam and water pipes. These should be put up in such a manner that there are no sags in any of the pipes to allow water to accumulate and freeze and burst the pipes in cold weather. The pipes should all slant to some point where the water may be allowed to drain off.

We recommend that galvanized pipe be used exclusively for water. Black pipe may be used for steam on the score of economy, but a uniform color of galvanized pipe throughout a creamery adds materially to its appearance.

Permanent pipes should be used to convey steam and water to every point where it is used, to make it convenient. Places should be left for attaching hose to both steam and water pipes for cleaning floors, scalding out tanks, etc. Some who claim to be large builders and erectors of creameries slight this part of the outfit, in fact, some have simply used a rubber hose to be carried from one point to another to convey both steam and water. This is a poor way of doing it.

An arrangement which we call a suction tee is very conveniently used at the sink. It is so arranged that both steam and cold water pipes may be connected and so throw a jet of hot water. These suction tees can also be arranged to heat water in sinks and in hot water tanks where they are used. They will prevent the loud and unpleasant noise which usually occurs when steam is turned into water and which is so annoying, especially to those who are not accustomed to it.

The sink should also be provided with a steam jet for scalding out all the utensils used in the creamery.

Steam Heating. Probably the most economical way for heating a creamery is to use the steam from the boiler, carrying it through a series of coils or using radiators as preferred. Care should be used that these pipes and radiators are so put in that the water will all flow out so that they cannot freeze up.

The heating pipes should be so arranged in the building to heat each different compartment, as desired, to a proper temperature.

When the boiler is located four feet or more below the radiator or coils used for heating the building, the water that has condensed in the radiators and heating pipes may be returned directly to the boiler and no steam trap will be required. When the water from the steam condensed in the heating pipes or radiators is returned to the boiler it is advisable to make the main line of piping which conducts the steam to the radiators or coils, of $1\frac{1}{4}$ inch pipe, and this system of piping should be entirely separate and distinct from the pipes that carry steam for heating water and such purposes.

If the boiler is located on a level or above the radiators or heating coils we recommend that all of the outlets be connected with one pipe, and a trap attached to this pipe so as to allow the water to escape without any waste of steam.

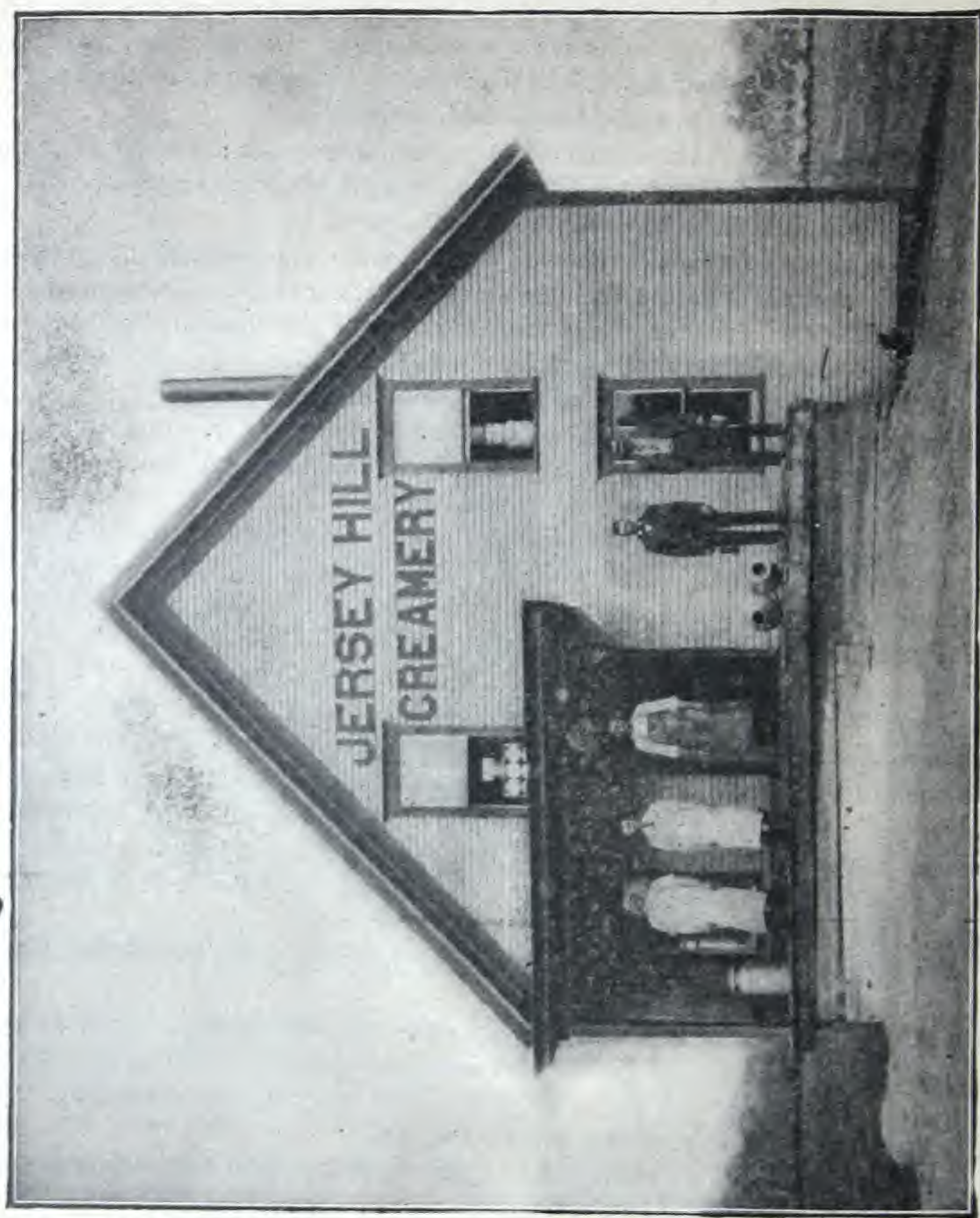


Fig. 9. JERSEY HILL CREAMERY, RYEGATE, VT.
Equipped by the
Vermont Farm Machine Co.
Where the
Gold Medal Butter is Made.

JERSEY HILL CREAMERY,

RYEGATE, VT.

The engraving on the opposite page shows a front view of the Jersey Hill Creamery at Ryegate, Vermont. This creamery is under the efficient supervision of R. F. Jaynes. It takes a front rank among the creameries in the State, leading all others in prices paid to the patrons. The average price paid to the patrons for the whole of the year 1895 was $24 \frac{17}{100}$ cents per pound.

The creamery is supplied with two of our United States Separators, and equipped completely with our Cream Vats, Churns and Butter Workers, which Mr. Jaynes considers unequalled for first-class work. Two different times the butter produced has been entered for competition at the Vermont Dairymen's Association's Annual Meeting, and has carried off the Creamery Sweepstakes, Grand Sweepstakes and Gold Medal, once in January, 1895, and again at the meeting held in January, 1896. A record like this is dependent upon a first-class product, which can only be hoped for with good milk handled with such apparatus and in such a way as will bring out all the points that tell in the results. Mr. Jaynes says of the U. S. Separator: "It makes the very best of cream," which is certainly most essential for a fine product, whether to be manufactured into butter or shipped to market.

TESTIMONIALS.

U. S. Butter Wins Creamery Sweepstakes, Grand Sweepstakes and GOLD MEDAL for Vermont.

The butter that "swept the board" at Rutland this year, taking eleven premiums, including the **Grand** and **Creamery Sweepstakes** and the **Gold Medal** for the State, as well as the butter that did the same thing at Burlington in 1894, was made from cream separated by your U. S. Separator.

The day I ran the milk that the butter was made from that I took to the Vermont Dairymen's Convention at Rutland, January 7, 1896, and which scored 97%, I ran through one U. S. Separator 2,300 lbs. per hour, **leaving no fat in the skimmed milk**, and I tested it three times; in the run of two hours and twenty minutes skimming 5,364 lbs. of milk.

I do not think the Separator is made yet that can do any better than this and get all the fat. What more can be done? As for quality of cream, we supply the best trade in Boston with their fancy butter, as our prices paid patrons for 1895 show, averaging $24 \frac{17}{100}$ cents per pound for the year.

R. F. JAYNES,

Supt. Jersey Hill Creamery.

Ryegate, Vt., Jan. 17, 1896.

The Winner also at the Vermont Dairymen's Association, 1894.

On January 4, 1894, I took in at Jersey Hill Creamery 4,672 pounds of milk, and run it all through one of your U. S. No. 1 Machines in two hours and five minutes. The skim milk tested just a trace on the neck of the Babcock bottles, not enough to count anything. January 5th, from the cream from this run, I packed 261 1-2 pounds of butter (one pound of butter to every 17.87 pounds of milk); of this I took 10 pounds of prints to the Vermont Dairy Association at Burlington, January 9, 10 and 11, 1894, and took the **First Prize**, the **Creamery Sweepstakes**, the **Grand Sweepstakes** over all and the **Gold Medal** for the state of Vermont. I have run creameries for the past fifteen years, and commenced running separators when the old 25-inch D. W. was king. I know all the different machines, and my long experience has taught me that the U. S. is the best of all. Every day it skims clean. It makes the very best of cream. It is easy to take care of and will run more milk without clogging; in fact, I cannot find a fault with it, and would like to hear from the man that can.

R. F. JAYNES,

Supt. Jersey Hill Creamery.

Ryegate, Vt., January 17, 1894.

A Two-Story Creamery.

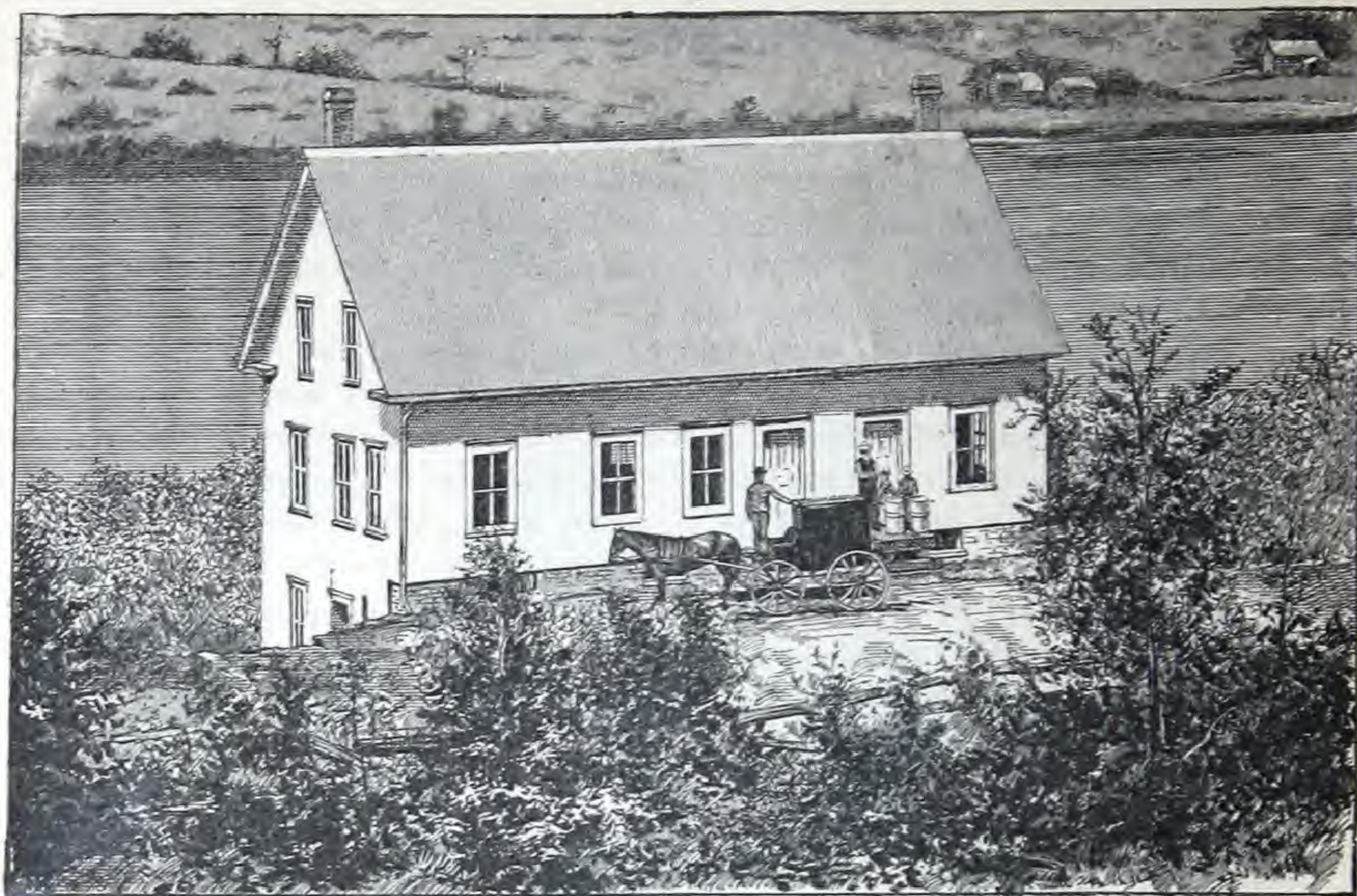


Fig. 10. Front View.

The above is a front view of a Two-Story Creamery. In the following pages are shown end view (Fig. 11), rear view (Fig. 12), and ground plans (Figs. 13 and 14). From these a complete understanding of the building can be had. The lower floor has ceiling 11 ft. high. The upper story has 12 ft. studs. The work room has a floor of cement.

This plan of creamery is popular in New England, and will be found very convenient. The receiving room is on the upper floor. The lower story may be of brick or stone, or may have brick or stone wall next to the hill-side, and the other side and the ends of wood.

Below is a complete list of material used in the construction of this creamery, with brick for the lower story.

We have a large drawing of this plan of Creamery Building, which we furnish, without charge, to those who purchase their apparatus of us.

Bill of Lumber for a Creamery Two Stories High.

Lower Story of Brick and Stone, Upper Story of Wood.

SIZE 26X42 FEET.

TIMBERS, BOARDS, Etc.

		42 ft. long, 6x6,	252 ft. at \$	per 1,000, \$
2 sills				
2 "	26 "	6x6,	156 "	"
2 cross timbers	26 "	6x6,	156 "	"
2 "	14 "	6x6,	84 "	"
2 bed "	26 "	6x6,	156 "	"
1 "	14 "	6x6,	42 "	"
17 floor "	10 "	2x6,	170 "	"
17 "	14 "	2x6,	238 "	"
10 "	16 "	2x6,	160 "	"
17 "	18 "	3x6,	459 "	"
29 "	29 "	2x6,	841 "	"
184 pieces studding	12 "	2x4,	1,472 "	"
17 "	14 "	2x4,	159 "	"
62 rafters,	20 "	2x6,	1,240 "	"

Outside boarding, 1 in. hemlock,	2,168 feet at \$	per 1,000, \$
Roof boarding, 1 in. hemlock,	1,760 "	"
Cream room floor, 1 in. spruce 13 ft. long,	208 "	"
Sheathing in basement complete (pine),	2,569 "	"
13 thousand shingles,		"
Floor boards for 2d floor, 1 in. hemlock,	1,092 "	"
Floor boards for 2d floor, 1 in. spruce,	1,092 "	"
Clapboarding complete,	2,892 "	"

FINISH.

8 corner boards 6 inches x 13 feet, 52 feet, at \$	per 1,000
2 base " 6 " x 28 " 28 "	"
2 " " 6 " x 42 " 42 "	"
2 fascia " 4 " x 44 " 29 "	"
4 " " 4 " x 20 " 27 "	"
2 plancher " 12 " x 44 " 86 "	"
4 " " 12 " x 20 " 80 "	"
2 frieze " 12 " x 42 " 84 "	"
4 " " 12 " x 20 " 80 "	"
10 per cent added for waste,	50 "
90 feet (in length) 4½-in. crown mould, at \$	per 100 feet,
90 " " 4-in. rake " "	"
175 " " 2-in. bed " "	"

WINDOWS AND DOORS.

15 windows, 4 light, 12x30 glass,	at \$	per window,
15 window frames	"	each,
15 " casings (inside)	"	"
6 doors, 2x6-8 (outside), with hardware,	"	
1 " 3x7 " "	"	
1 " 2-8x6-8 (inside) " "	"	
1 " 3x7 " "	"	
3 " frames, 4x6 8,	"	
1 " " 3x7,	"	
3 " casings, 4x6-8 (inside),	"	
1 " " 3x7 " "	"	
1 " " 2-8x6-8 " complete,	"	
1 " " 3x7 " "	"	
1 refrigerator door, 3x7, with casing, complete,	"	
3 basement windows, 3 lights 10x14 glass,	"	
3 " " frames,	"	

NAILS.

275 lbs. 8d common,
65 lbs. 8d finish,
40 lbs. 5d for clapboarding,
70 lbs. 3d for shingling,

BRICK AND STONE BASEMENT.

Excavation for basement (estimated),
Bank wall 42 ft. long, 9 ft. high, 18 in. thick, consisting of 17 perches of stone laid in mortar at \$ per perch,
Number of brick for basement wall, 12 in. thick, 11 ft. high on three sides and 2 ft. above stone wall on bank side, 21,735.
Number of brick for 8-in. wall, 14,490.
Price of brick per 1,000, \$
Cost per 1,000 brick to build basement wall (12 in.),
Mortar furnished by mason,
No. brick in chimney, 16x20 in., 42 ft. high, 1,610 at \$ per 1,000
Cost to build chimney, mortar furnished by mason at \$ per 1,000 brick,

CEMENTING BASEMENT FLOORS.

9 bbls. Portland cement, at \$
4 " common "
Labor, \$ (space cemented, 40x24),
Painting building (estimated),
Labor of carpenters "

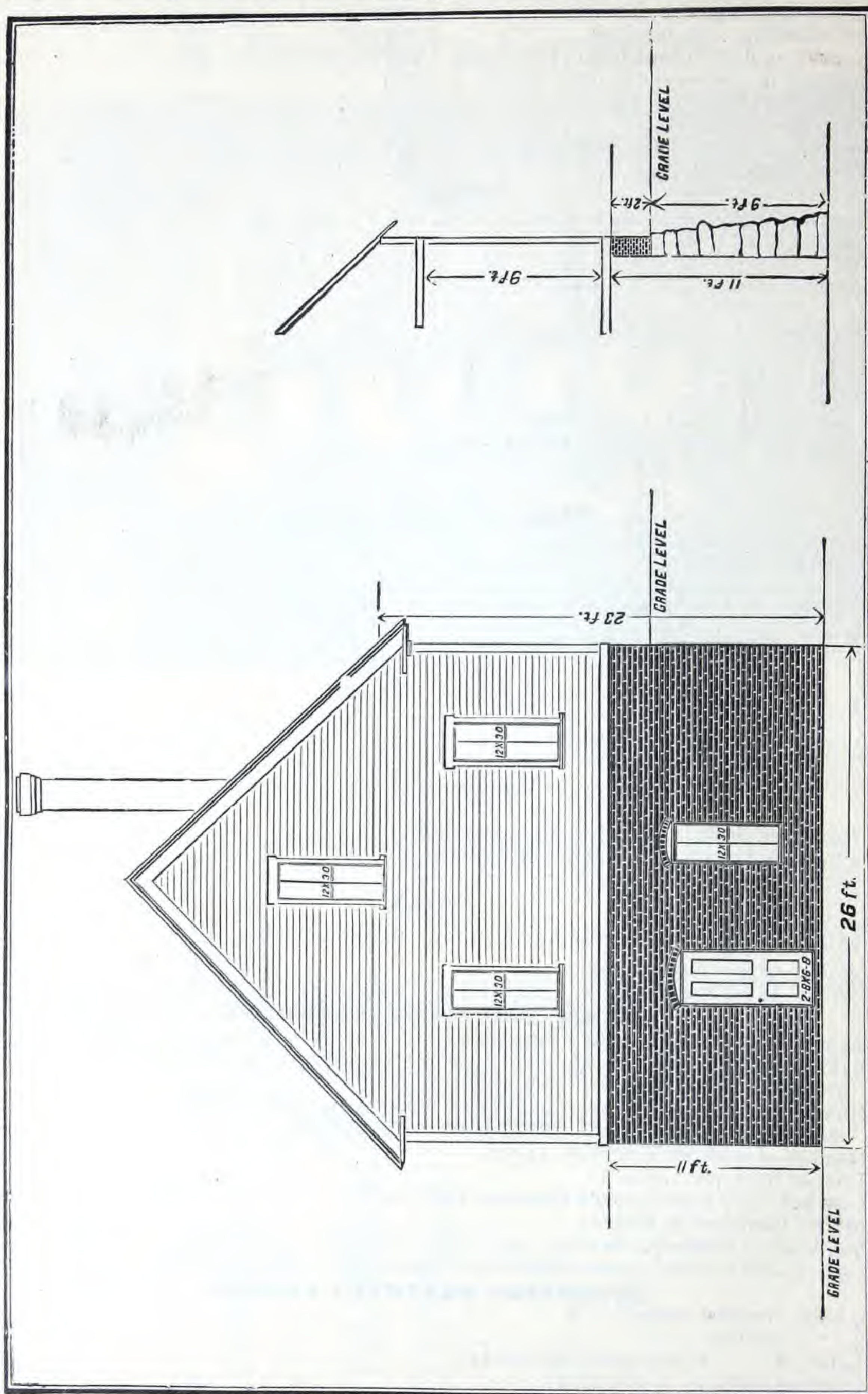


Fig. 11. TWO-STORY CREAMERY (End View).

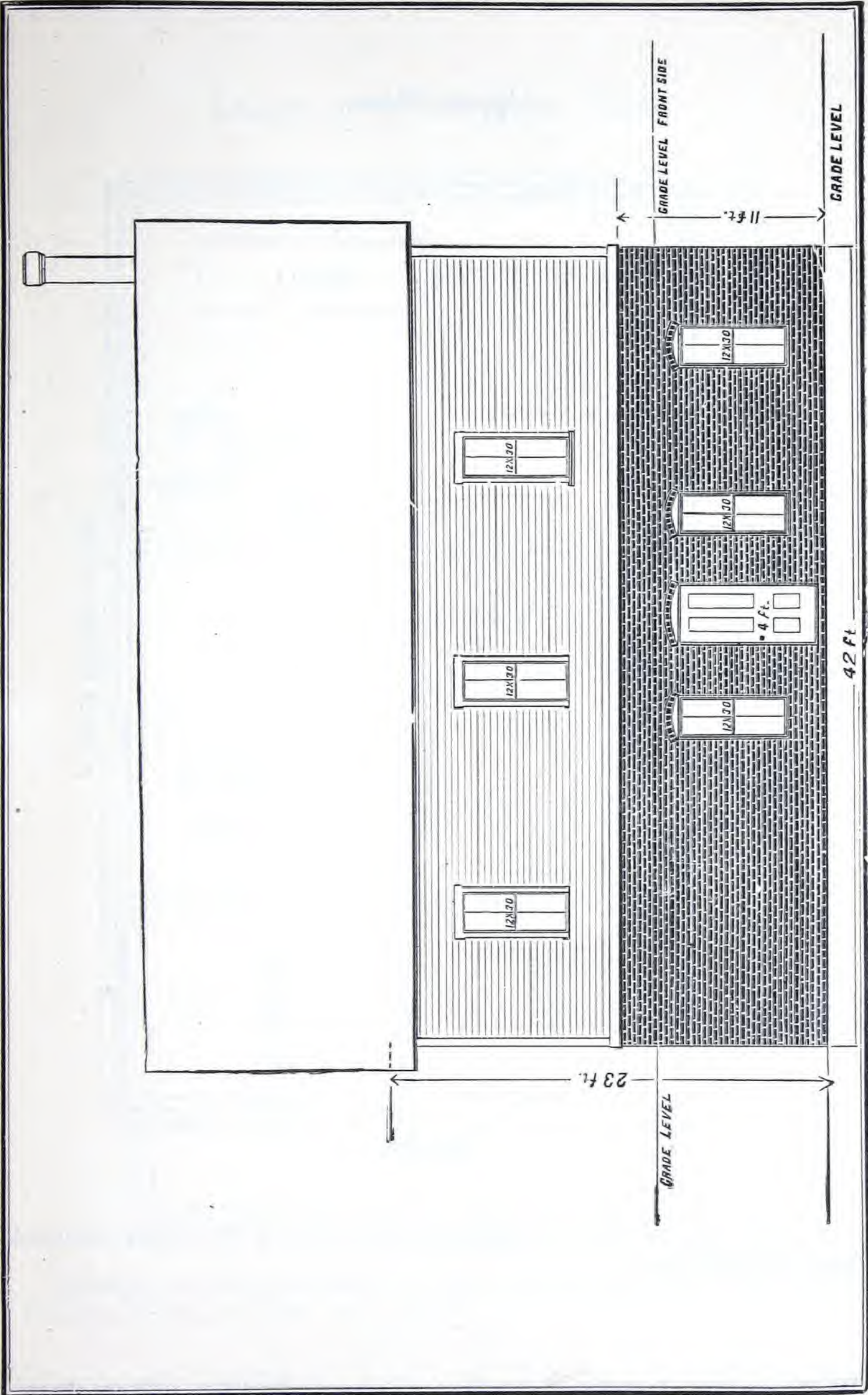


Fig. 12. TWO-STORY CREAMERY (Rear View).

Upper Floor.

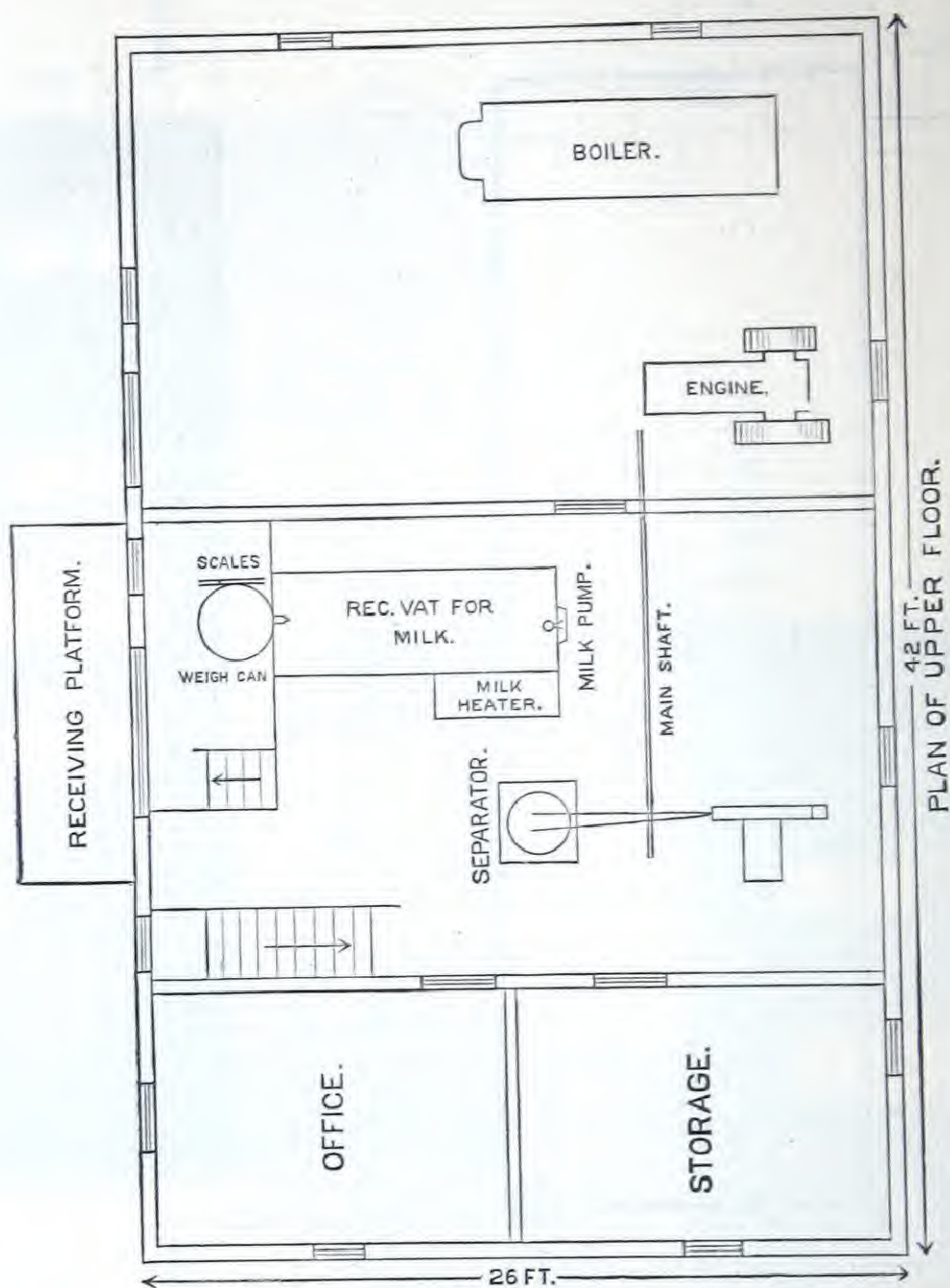


Fig. 13.

The above cut represents the upper or Separator floor of the building illustrated in Figs. 10, 11 and 12.

We furnish large Drawings of this Plan of Creamery Building, without charge, to those who purchase their apparatus of us.

Lower, or Work Room Floor.

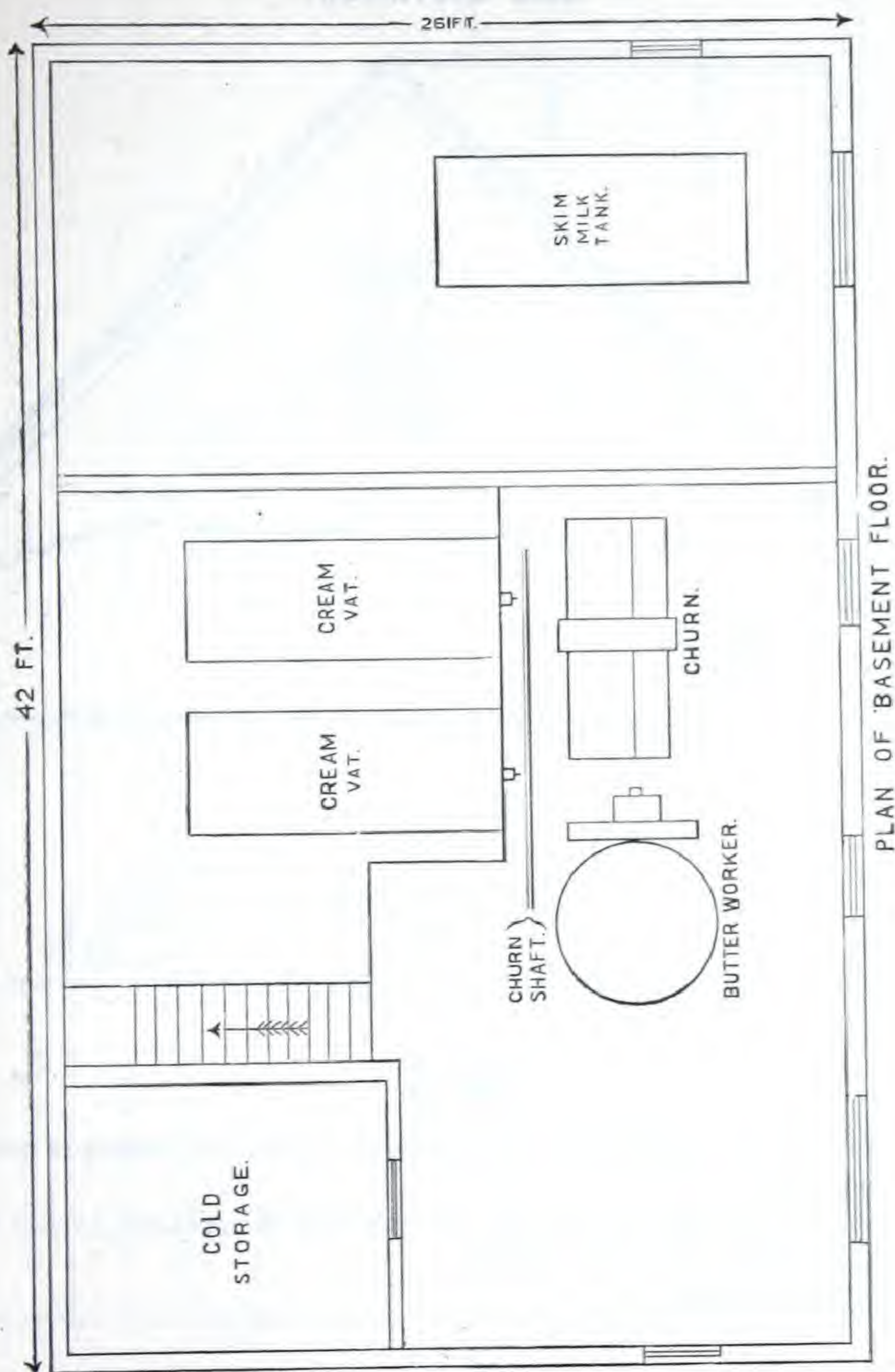


Fig. 14.

The above illustration represents the lower, or work and churn room floors of the Creamery illustrated in Figs. 10, 11 and 12.

We have large drawings of this plan of Creamery Building which we furnish, without charge, to those who purchase their apparatus of us.

End Elevation.

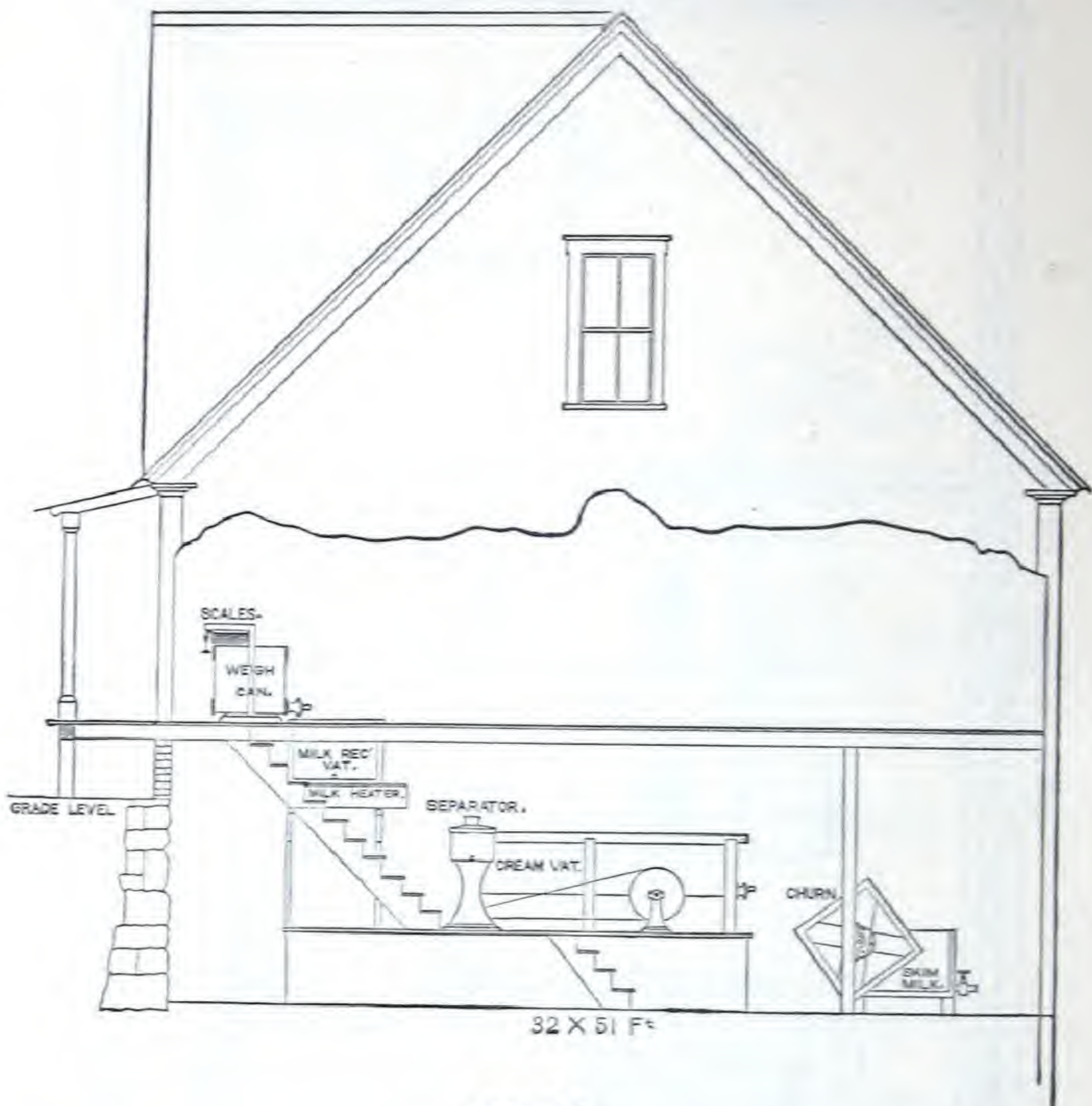


Fig. 15.

The above illustration represents a sectional end view of the building of which Fig. 16 is a ground plan.

This cut shows the necessary elevation of each piece of apparatus, so that the milk will flow to the different points as required.

For description see page 30.

We have large drawings of this plan of Creamery Building which we furnish, without charge, to those who purchase their apparatus of us.

Arrangement of Floor Plan.

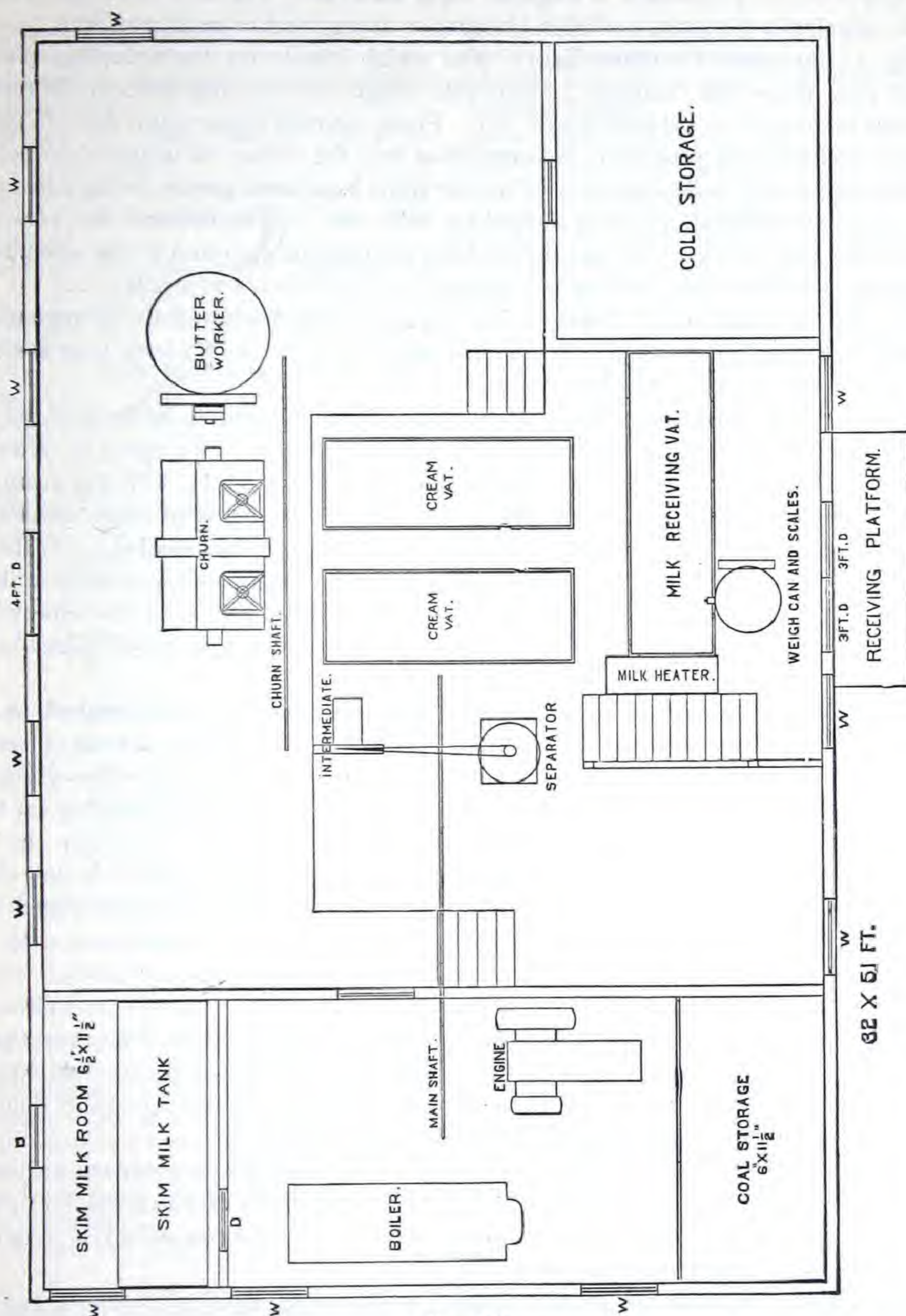


Fig. 16.

The above illustration is a floor plan of Creamery, end elevation of which is shown on opposite page, and description is found on the following page.

We have large drawings of this plan of Creamery Building, which we furnish, without charge, to those who purchase their apparatus of us.

Two-Story Creamery Buildings,

Using the Basement for Churning and Working the Butter.

Figures 10 to 14 illustrate arrangements of basement creamery buildings which are quite popular in Vermont and New Hampshire along the Connecticut River.

Fig. 13 illustrates the upper floor. The weigh can is on the receiving platform, three feet above the roadway. From this weigh can the milk flows to the receiving vat and is pumped to the milk heater vat. From the milk heater vat it flows to the separator, and from the separator the cream runs into the cream vat in the room below.

The engine and boiler are located on the right hand end, power being conveyed to the separator through shafting extending from the engine room to the work room. The churn and butter worker are driven from shafting in the room below and power is communicated from the shafting in the upper room by means of a belt.

An office is located conveniently in one corner of this floor, and the storage room is located in the opposite corner. A stairway leads from the work room, near the weigh can platform, to the room below.

Fig. 14. The cream vats are on a platform three feet above the floor of the churn room, and the cream flows from these vats into the churn. The butter is afterwards taken to the butter worker and then to the cold storage room, which is arranged as described under that head in another place. There is plenty of room on this floor for printing and packing the butter, and getting it ready for the market. On the right hand end of the lower floor is a room partitioned off, designed for a skim-milk tank and a butter-milk tank. The milk runs from the separator above to this tank, where it can be drawn out into the farmers' cans, and if desired the tank can be raised so as to run the milk into the cans in the farmers' wagons.

In some sections of the country the plan of creamery illustrated in Figs. 15 and 16 is preferred. These plans represent the apparatus set on a series of steps, better illustrated in Fig. 15. The milk flows from the weigh can—which is on the receiving platform three feet above the road level—to the milk receiving vat below, thence to the milk heating vat, and to the Separator. From the Separator the cream runs into the cream vats and thence to the churn. Also the skim-milk will flow directly from the Separator to the skim-milk tank, which is placed above the floor level at a sufficient height so that the skim-milk is drawn from this tank into the farmers' cans.

It will be observed that in this plan of creamery all milk pumps are avoided, the plan from beginning to end being one of gravity. Some butter makers, as well as some creamery proprietors, object to this plan because of the labor and time consumed in the butter maker going up and down stairs looking after different parts of machinery.

Creamery buildings built on this plan are necessarily more expensive than when built on one floor, because it necessitates a two story building.

The arrangement in Fig. 16 can be adapted very nicely to a creamery with the apparatus all on one floor, except that the separator and cream vats and weigh can should be raised three feet. With this change, of course, milk pumps would be required as described above and with other plans.

The engine and boiler are usually placed on the same level as the churn and butter worker in plans Figs. 15 and 16. A partition is run across one end of the engine room, making a room separate for the skim-milk tank. In another corner of the building is the cold storage room. The office and room for storage of tubs, etc., are located on the upper floor, which is not shown in the drawing. Following we give an estimate of the material and work required to complete this building. It is only adaptable to locations where there is a side-hill, and is called a basement creamery.

We have large drawings of this plan of Creamery Building which we furnish, without charge, to those who purchase their apparatus of us.

SPECIFICATIONS OF MATERIAL FOR Bank Wall or Basement Creamery, Separator Plan.

32 x 50 Feet.

Excavation for basement, estimated,	4,000 ft. 7-8 matched flooring.
Bank wall of stone, 50 ft. long, 2 ft. thick, and 7½ ft. high above floor level, consisting of	4,000 ft. matched ceiling.
32 perches of stone, laid in mortar at \$ per perch.	18 bbls. cement for entire basement floor.
Bank wall 16 ft. long on each end, 7½ ft. high above floor level, 2 ft. thick, consisting of	18,500 shingles.
21 perches of stone laid in mortar, at \$ per perch.	3,700 clapboards.
2,150 bricks for 8 in. basement wall on front side	3,000 sq. ft. building paper.
and 16 ft. on each end, 2 ft. above stone wall, at \$ per M.	300 lbs. 8d common nails.
2 sills 6x8, 50 ft. long,	50 lbs. 10d common nails.
5 " 6x8, 32 "	50 lbs. 5d common nails.
2 " 6x6, 32 "	75 lbs. 8d finish nails.
4 posts 6x6, 10 ft. long.	100 lbs. 3d common nails.
15 pieces 2x8, 16 ft. long.	100 lbs. 40d common nails.
2 " 6x6, 26 "	Door and window casing, cornice and outside casing, 1,600 ft.
2 " 6x6, 20 "	15 14x28 4-light windows.
3 " 6x6, 10 "	1 pair 3x7x1½ outside doors.
100 " 2x4, 10 "	1 " 2x7x1½ " "
60 " 2x4, 14 "	1 2½x6½x1¼ " with 2 lights glass.
58 " 2x6, 24 "	3 2½x6½x1¼ inside doors.
10 " 2x6, 12 "	6 door knobs.
38 " 1½x6, 10 "	3 mortise locks.
60 " 2x4, 20 "	11 pairs door hinges.
36 " 2x8, 12 "	6 door bolts.
18 " 2x8, 14 "	4 pairs 8-in. strap hinges.
18 " 2x8, 13 "	15 window bolts.
26 " 2x6, 32 "	350 ft. 2-in. plank in ice-box for refrigerator.
7,500 ft. common boarding.	75 lbs. gal. iron in drip pan for ice-box.
	8 lbs. solder.
	4 gals. shellac for refrigerator.
	15 gals. varnish on inside sheathing.
	20 gals. mixed paint.

TESTIMONIALS.

\$2,200.

My whole plant cost me \$2,200. I have a very nice building and the best of apparatus, the separator and all the goods being purchased of the Vermont Farm Machine Company. This amount covers the cost of the spring, also bringing it to the factory, a distance of 100 rods, and the piping of the factory throughout with steam and water.

The Separator has given me entire satisfaction. Before putting up this plant I worked in several factories in the West and also in the East, handling the De Laval Standard and also the Alpha, and I think the U. S. superior in many respects, so much so that I shall continue their use in the future.

FRANK HOAG.

Franklin, N. Y., Nov. 6, 1894.

\$2,200.

Our plant cost us about \$2,200. The apparatus for our factory was purchased from the Vermont Farm Machine Company, and it has given good satisfaction. The items of cost are as follows:

Building, about.....	\$ 800 00
Machinery.....	1,250 00
Well and other expenses.....	150 00
	\$2,200 00

We are highly pleased with our entire outfit purchased of you. The U. S. No. 1 Separator especially is doing fine work. We are skimming 12½ per cent cream, average 2,100 pounds of milk per hour, and scarcely a trace of fat is left in the skimmed milk by Babcock Test.

Portersville, Penn., Nov. 2, 1894.

YELLOW CREEK CREAMERY CO.

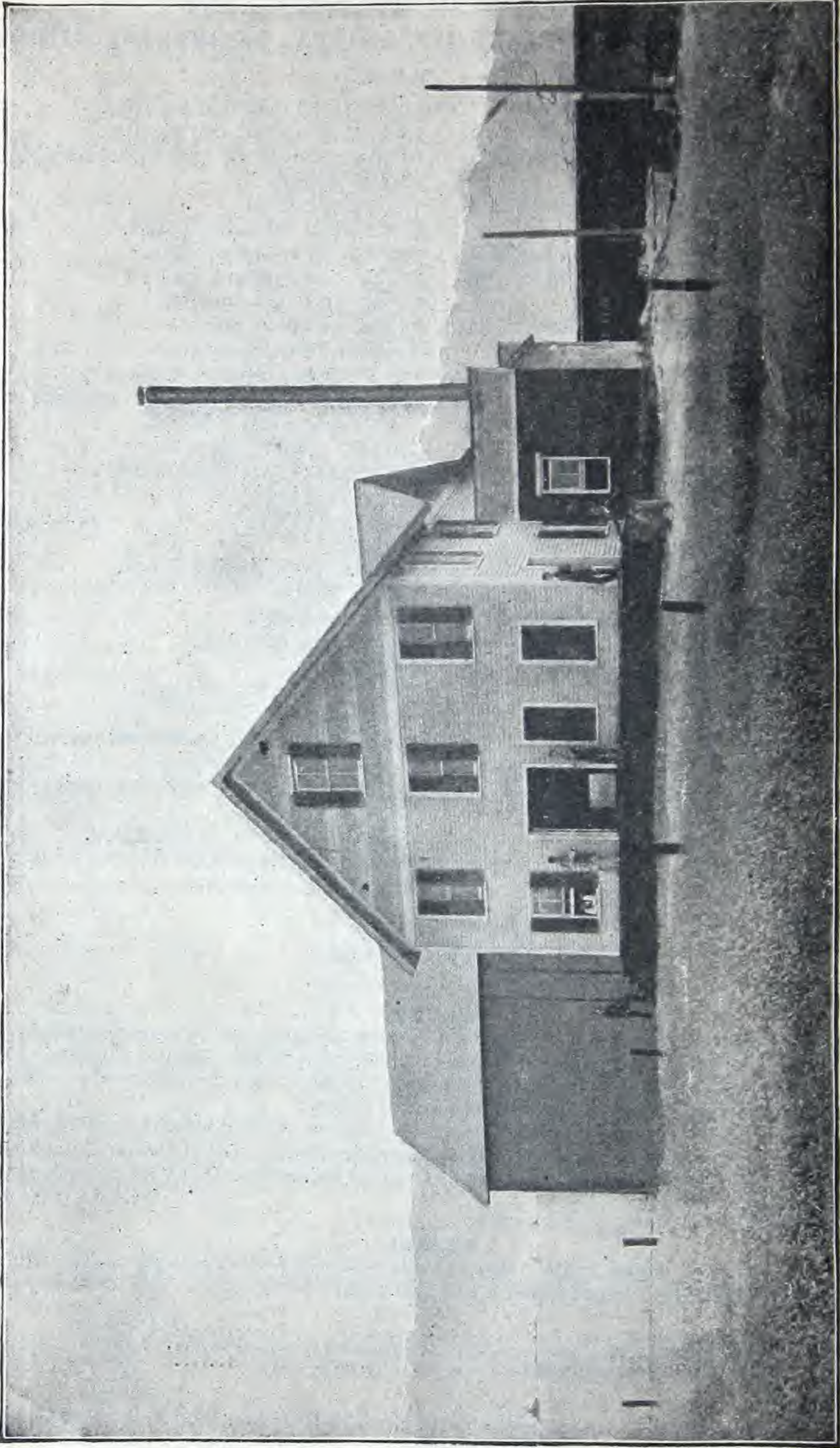


Fig. 17. ALMEDA CREAMERY, ALMEDA, N. Y.

**Built after the Vermont Farm Machine Co.'s Plans
and equipped completely with their apparatus.**

**One of New York's Largest Creameries, having handled
30,950 lbs. of milk in one day.**

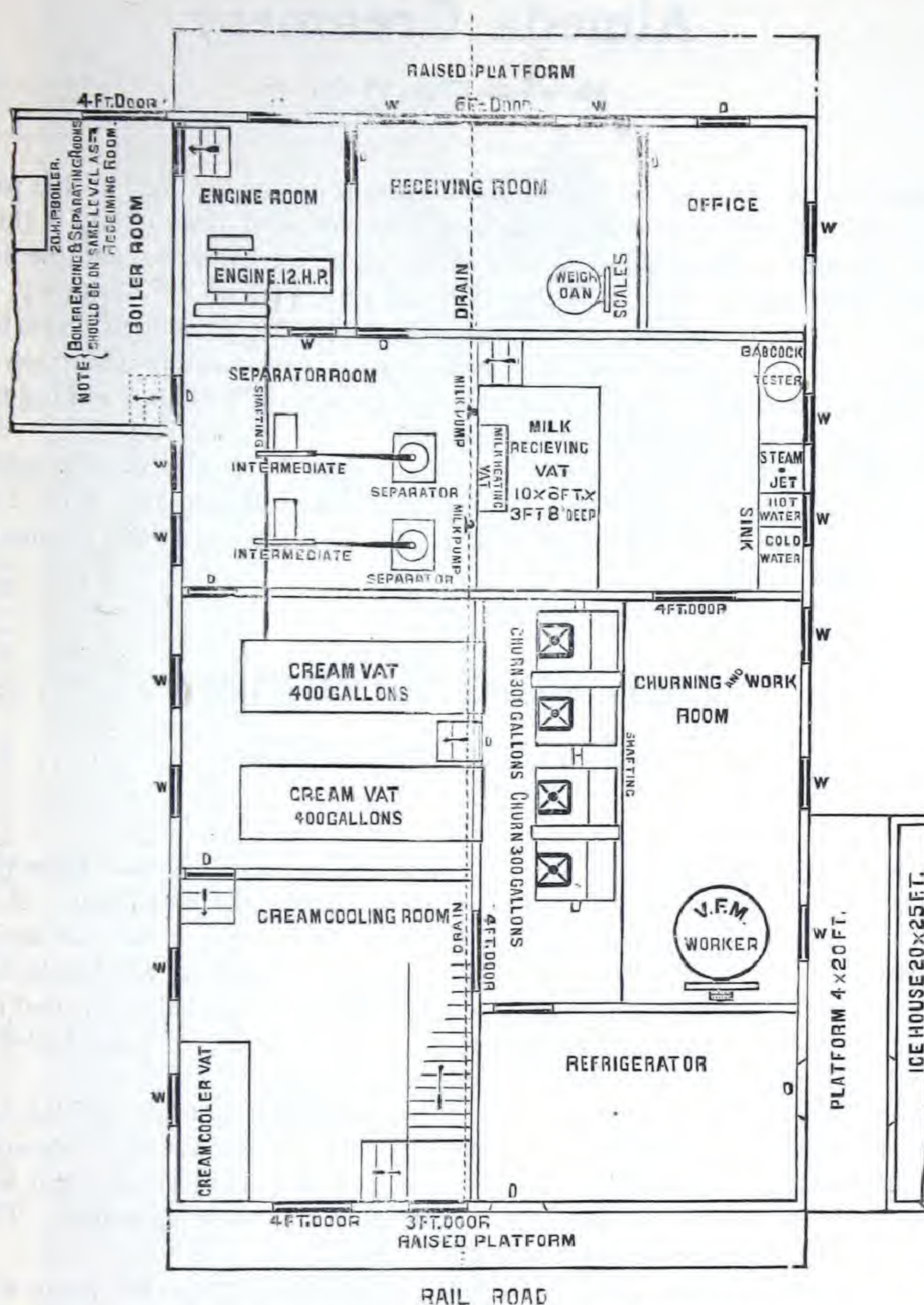


Fig. 18. Ground Plan Almeda Creamery.

Finest Creamery in that part of New York.

Our creamery, equipped complete with your apparatus, including two No. 1 United States Separators, has been in operation since last December. We started with less than 1,000 lbs. of milk a day, and May 1st received over 27,000 lbs. The Separators each run over six hours without stopping to clean, and tests of skimmed milk, after a six hours' run, show about five hundredths of one per cent of fat.

The whole outfit has proved entirely satisfactory, and ours is considered the finest equipped creamery in this part of New York State.

Almeda, N. Y., May 2, 1895.

ALMEDA CREAMERY CO.,

J. J. Jackson, Sup't.

Almeda Creamery.

Shown in Figs. 17 and 18.

The Almeda Creamery, at Almeda, New York, is one of the best in that part of the State, and they do a very large business. A picture of the building is shown on a preceding page. The ice house is seen at the left of the Creamery, and the boiler and engine room in a lean-to at the right. Fig. 18 is a plan of the Creamery, which is excellent for the class of business they do. They ship a large amount of cream to the city markets, and it will be noticed they have a special cream cooling room convenient to the shipping platform. The railroad runs just back of the building, making it exceedingly convenient to ship butter and cream.

This Creamery has made a fine record since it started. During the first part of 1895 they paid, for January, 28 cents; February, 25½ cents; March, 22½ cents, and April, 22½ cents. The largest amount of milk that has been taken in at this Creamery in one day is 30,950 pounds.

Lakeland Creamery.

Shown on the opposite page.

This building was first erected on the banks of Cazenovia Lake, Cazenovia, N. Y. The cost of the original was about \$3,000, not including the machinery. It is one of the finest constructed creameries in the country. As first built it was not designed for a Separator factory. We have arranged the ground plan (Fig. 20) for the Separator system. It will be noticed that the boiler and engine are located at one end in a wing or lean-to, and that there is a line of shafting running through from the boiler room to the work room, which drives the cream separators.

The milk is received on the front side on the receiving platform, which is three feet above the main work room floor, and dumped into the weigh can on this platform and from the weigh can it runs to the receiving vat. From the receiving vat it is pumped up to the milk heater vat from which it flows to the cream separators. The cream flows from the separators to the cream vat.

In this plan of building it will be necessary to drop the floor at the point where the churn is set, three feet, so that the cream will run from the cream vat to the churn.

The butter worker is located in a separate room. This room is also well adapted to printing and packing butter and getting it into condition for shipment. The cold storage and refrigerator rooms adjoin this room. The ice house is separate. The building as originally designed includes a tenement in the upper part where the creamery superintendent lives.

We consider this ground plan excellently arranged and the building one that we can recommend to those who desire to put up so expensive a building.

We have large drawings of this plan of Creamery Building which we furnish, without charge, to those who purchase their apparatus of us.

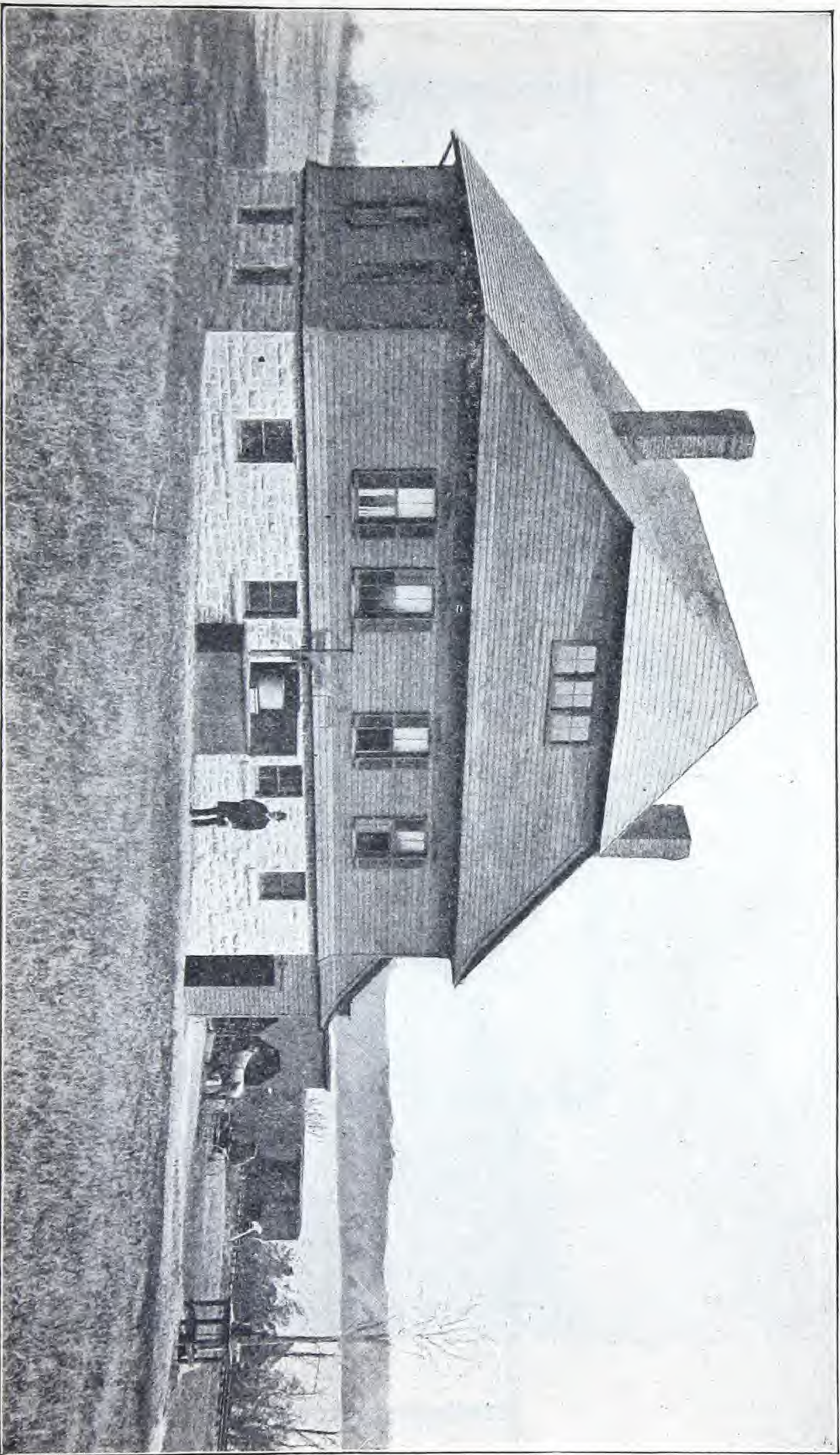


Fig. 19. LAKELAND CREAMERY, CAZENOVIA, N. Y.
Equipped by the Vermont Farm Machine Co.
Dwelling for Superintendent
in Upper Part of Creamery.

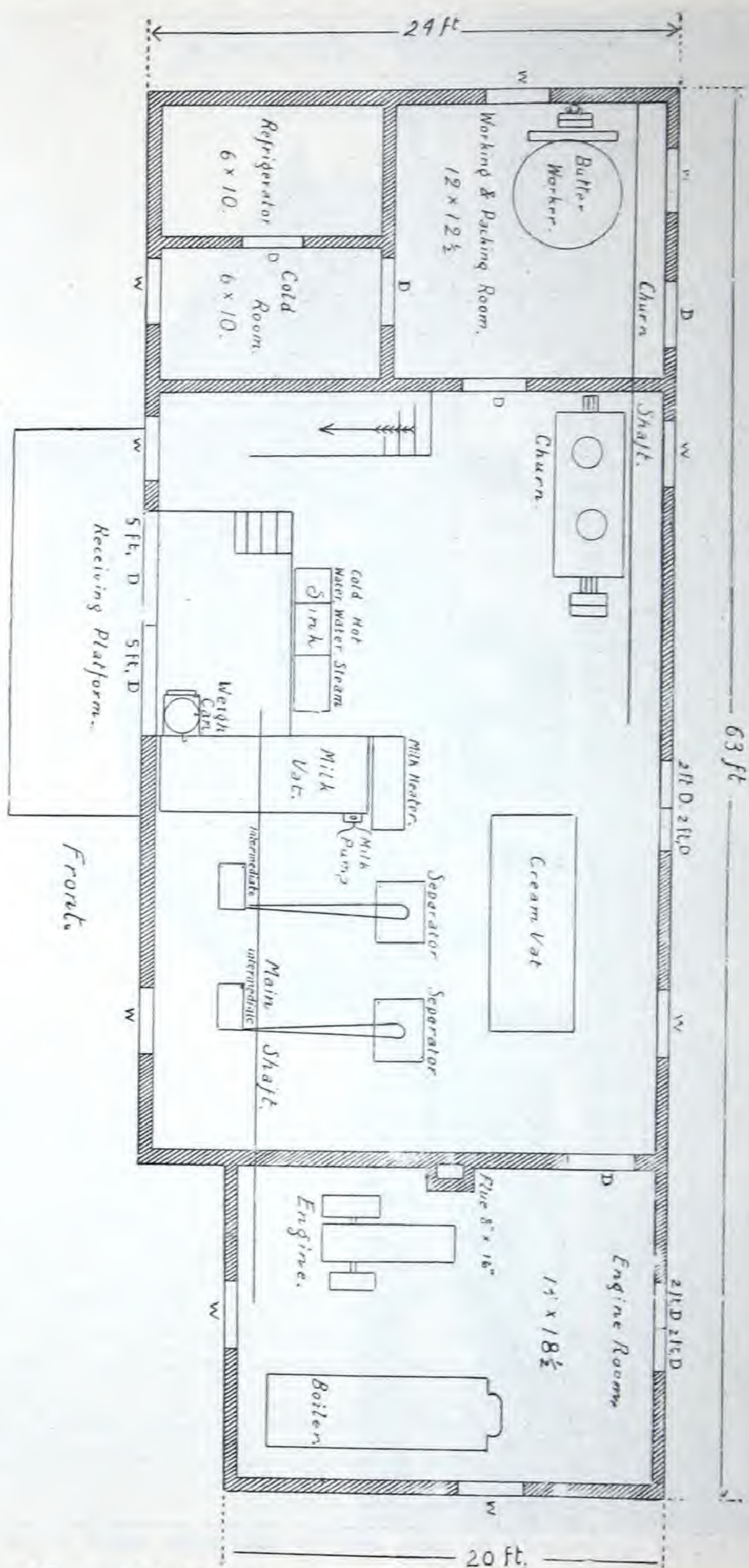


Fig. 20. Lakeland Creamery. For Description see page 34.

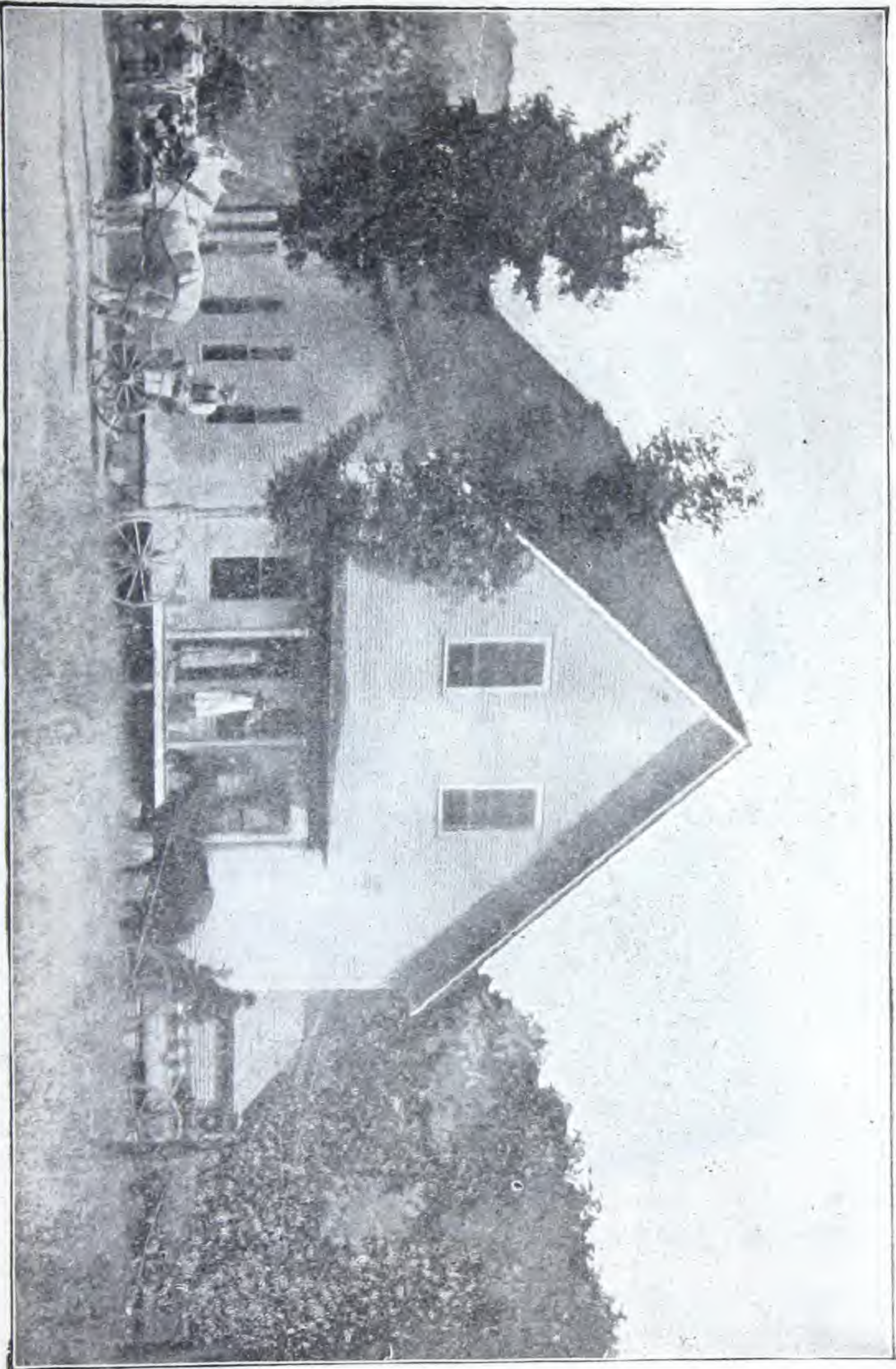


Fig. 21. GREEN MT. CREAMERY, WEST TOPSHAM, VT.
One of Vermont's Prosperous Creameries.
Equipped by the Vermont Farm Machine Co.
Operating two United States
Cream Separators.

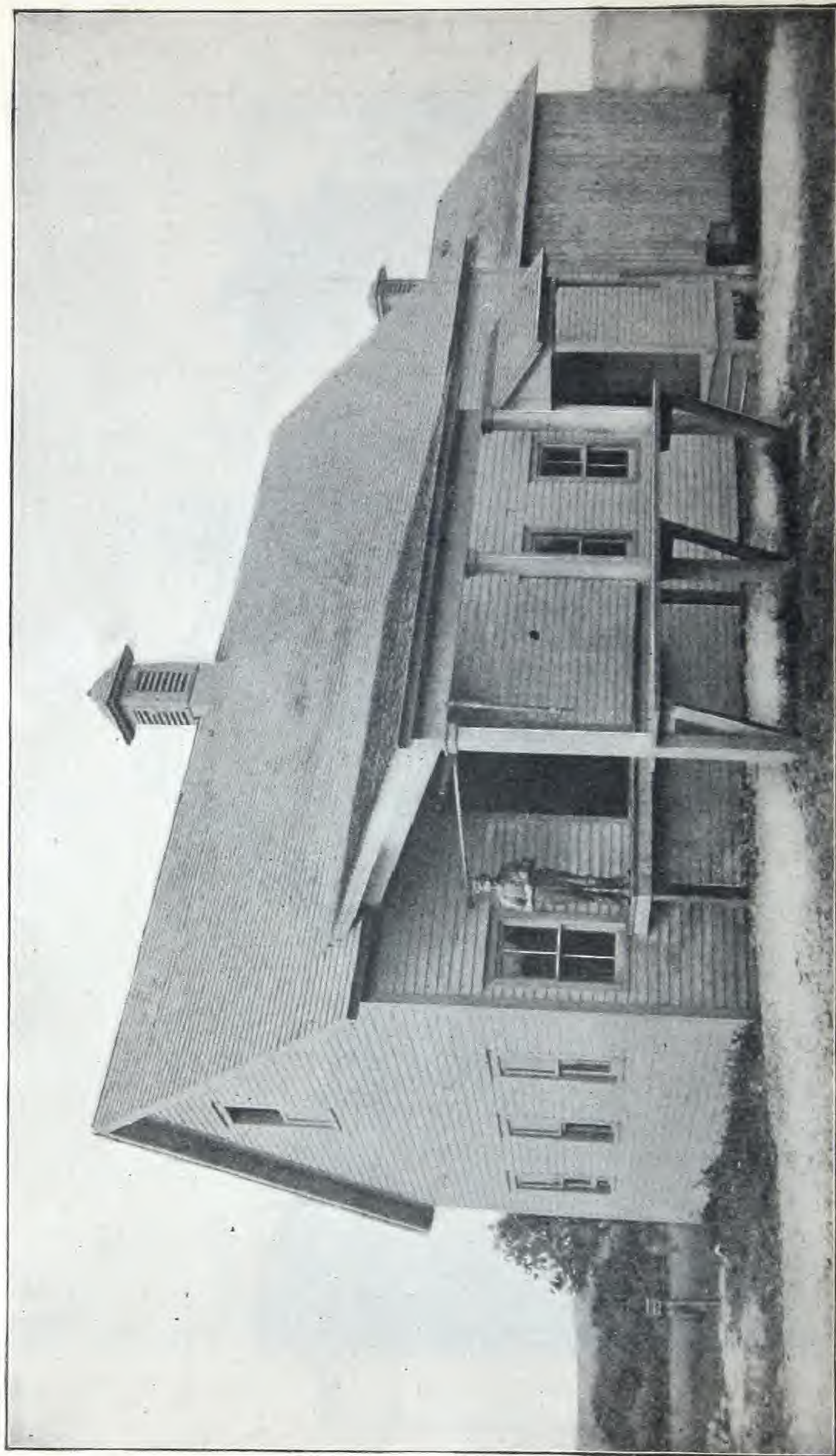


Fig. 22. OTISCO CREAMERY, OTISCO, N. Y. A Well Equipped and Convenient Plant, Costing only \$3,000.

**Erected and Equipped by the
Vermont Farm Machine Co.**

Ground Plan.

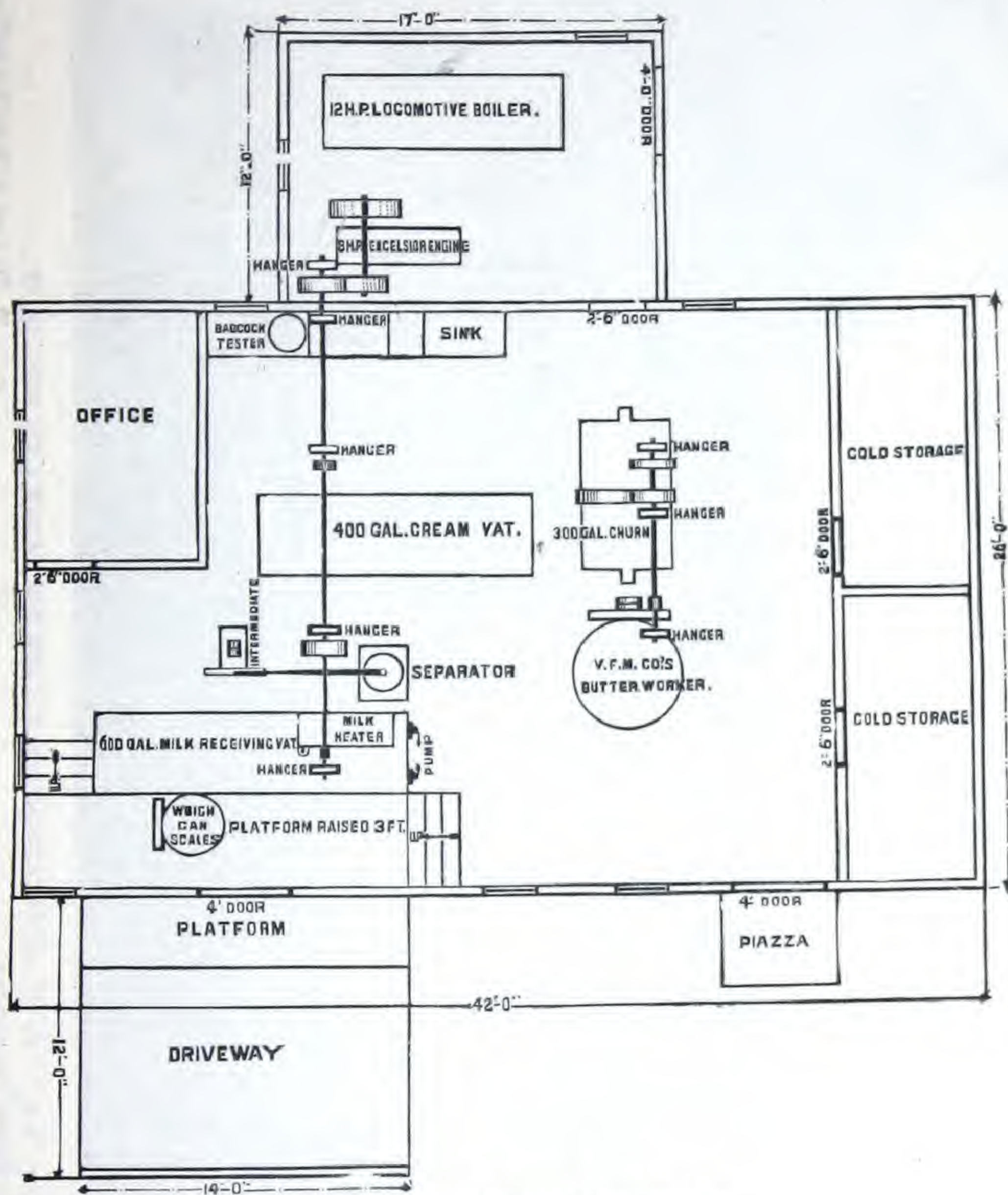


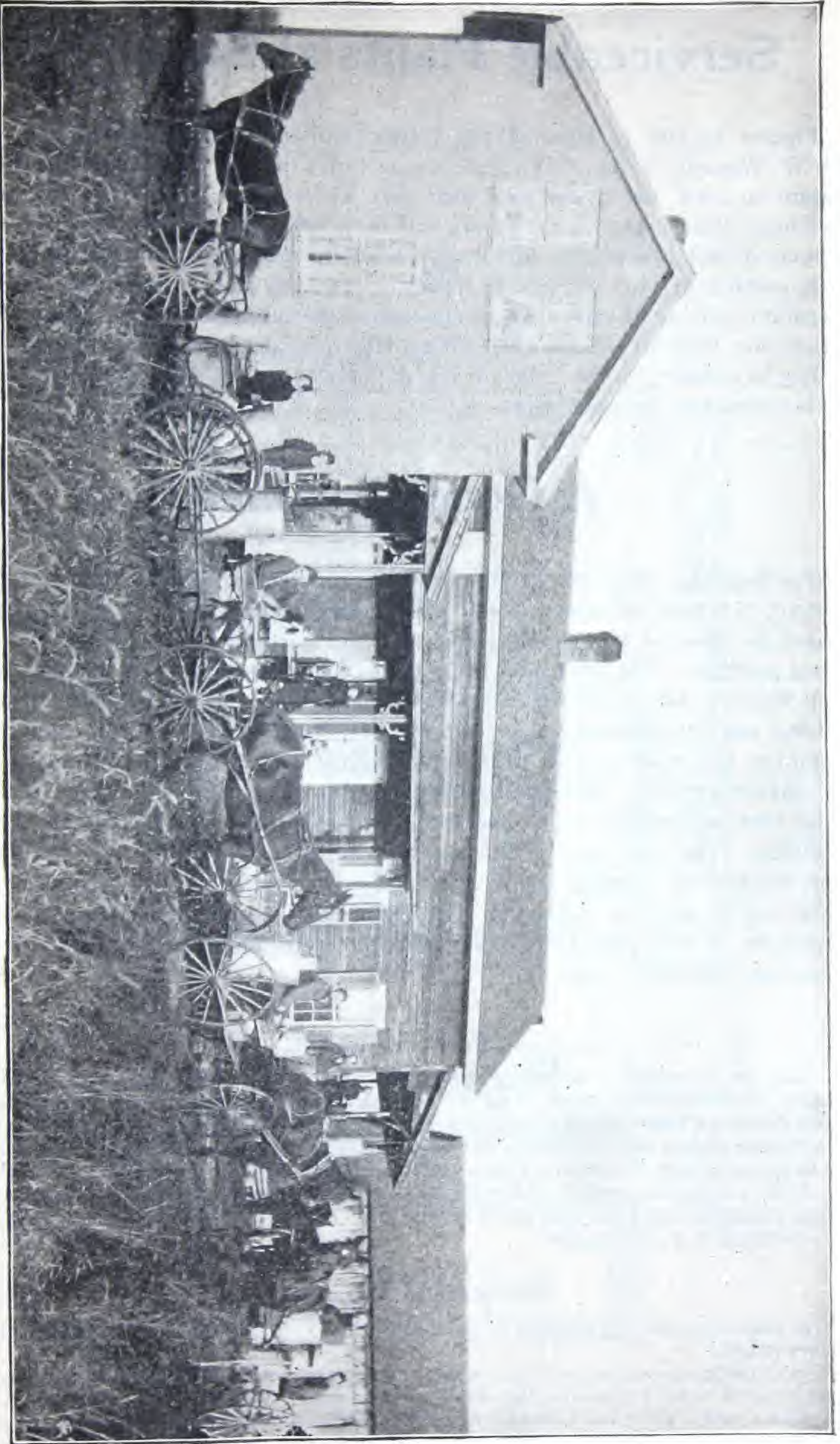
Fig. 23. Otisco Creamery.

We erected this building and furnished it with apparatus at a total cost to the Creamery Company of \$3,000 for the building and machinery complete. It is a well equipped and convenient plant.

The milk flows from the weigh can on the receiving platform to the receiving vat, from there is pumped into the milk tempering vat, whence it flows into the Separator. The cream runs from the Separator into the cream vat, and is transferred to the churn. The engine and boiler are in an ell by themselves.



Fig. 24. E. C. RINDGE'S CREAMERY, CORTLAND, N. Y.
A Home Creamery Doing a Good Business.
Cost, with Apparatus, only \$1,136.
Using a No. 1 United States Cream Separator.



Another Prosperous
Home Creamery.

Fig. 25. D. W. WESCOTT'S CREAMERY, MOIRA, N. Y.
Equipped with the Vermont Farm
Machine Co.'s Apparatus.

Serviceable Plants at Small Cost.

Figures 24 and 25, showing the creameries of E. C. Rindge, Cortland, N. Y., and D. W. Wescott, Moira, N. Y., represent factories that are gotten up without so much regard to style, but by utilizing what they had at hand, and adding the necessary buildings, these creameries are made very serviceable and in both of the plants a large amount of milk is handled. Mr. Rindge writes that his plant, including the machinery, only cost him \$1,136. He has our apparatus, including a No. 1 Improved United States Separator, having discarded a Separator of a different make and put the U. S. in its place. Mr. Wescott also has a No. 1 Improved U. S. Separator, and other apparatus, but writes he cannot give the items of cost of the plant, as an old building was fixed over to accommodate the machinery.

A Good Creamery.

The floor plan (Fig. 26) on the opposite page represents a very good arrangement indeed, in which the space is well used. The receiving platform is raised three feet above the level of the creamery floor, and the Separator and cream vat are on this same platform. The milk flows from the receiving weigh can into the milk receiving vat, which is set on the creamery floor. From there it is pumped into the milk tempering vat, from whence it flows into the Separator. The cream runs from the Separator into the cream vat near it, and from the vat into the churn on the floor below, all by force of gravity. The skim-milk is pumped by the second milk pump into the skim-milk tank in the story above, and from there is distributed to the farmers outside the building. The engine and boiler are in a lean-to. The basement of the creamery in this instance is arranged for the cold storage of butter, but if desired a cold storage room can be built in connection with an ice-house beside the building, as described elsewhere in this pamphlet. The Babcock Tester and sink, etc., are arranged as convenient about the room.

Cost Only \$1,136.

The cost of my plant, including the apparatus, was \$1,136. I am using the apparatus furnished by the Vermont Farm Machine Company, and it is giving complete satisfaction. If good goods are wanted, they furnish them every time. I have had no trouble with any of the machinery getting out of repair, while other factories near here, using other makes, have had to have machinery overhauled and repaired. I cannot speak too highly of your Improved U. S. No. 1 Separator, which I have been using the past season. It has a large capacity, is a clean skimmer, and never gets out of repair.

E. C. RINDGE.

Cortland, N. Y., Oct. 12, 1894.

Complete in Every Respect.

The machinery for my creamery I purchased from you, and it has proved to be complete in every respect.

I have made a good record for the season, as compared with other creameries, and it is my Improved U. S. No. 1 Separator that has done this for me. We have all kinds of separators here to work against, but it has knocked them all out on the average for the season. In regard to its skimming, I have tested the skimmed milk time after time with the Babcock tester and could never find a trace of butter fat left in it.

Moira, N. Y., Nov. 26, 1894.

D. W. WESCOTT.

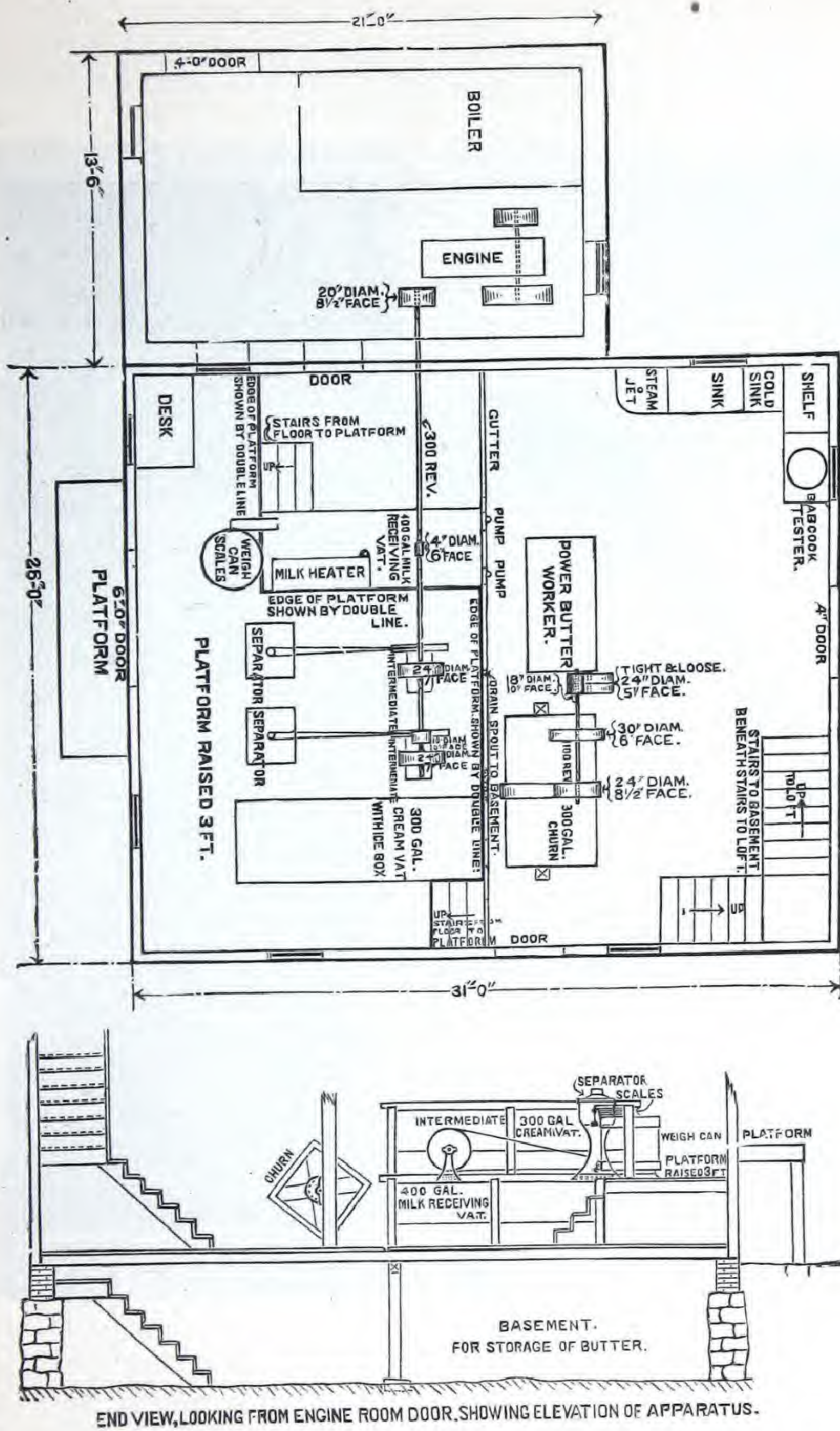


Fig. 26. A Vermont Creamery.

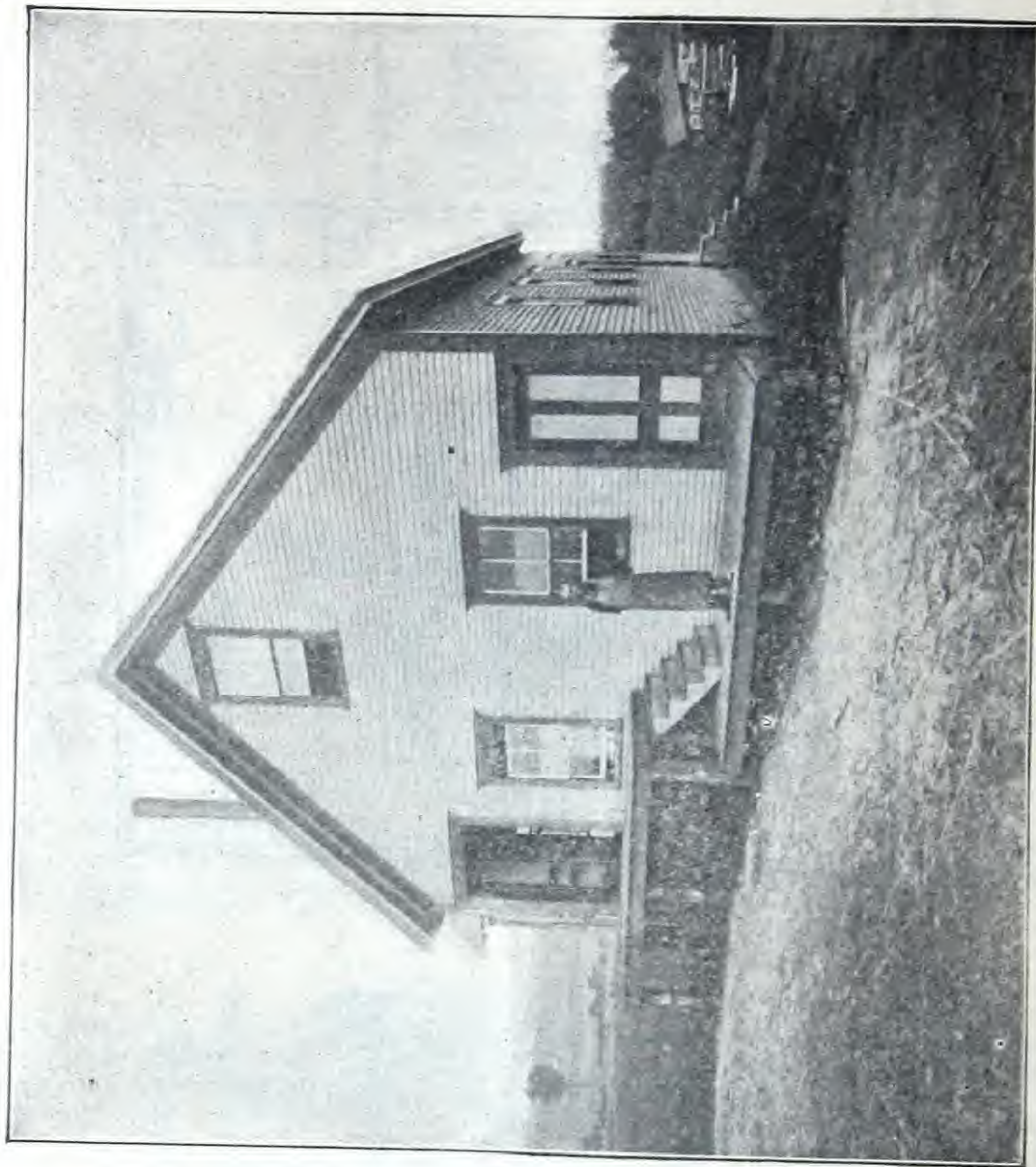


Fig. 27. EAST RYEGATE CREAMERY, EAST RYEGATE, VT.
Equipped with the Vermont
Farm Machine Co.'s Apparatus.
A Creamery of Moderate Size and Small Expense,
Costing, for Building and Equipment, \$2,500.

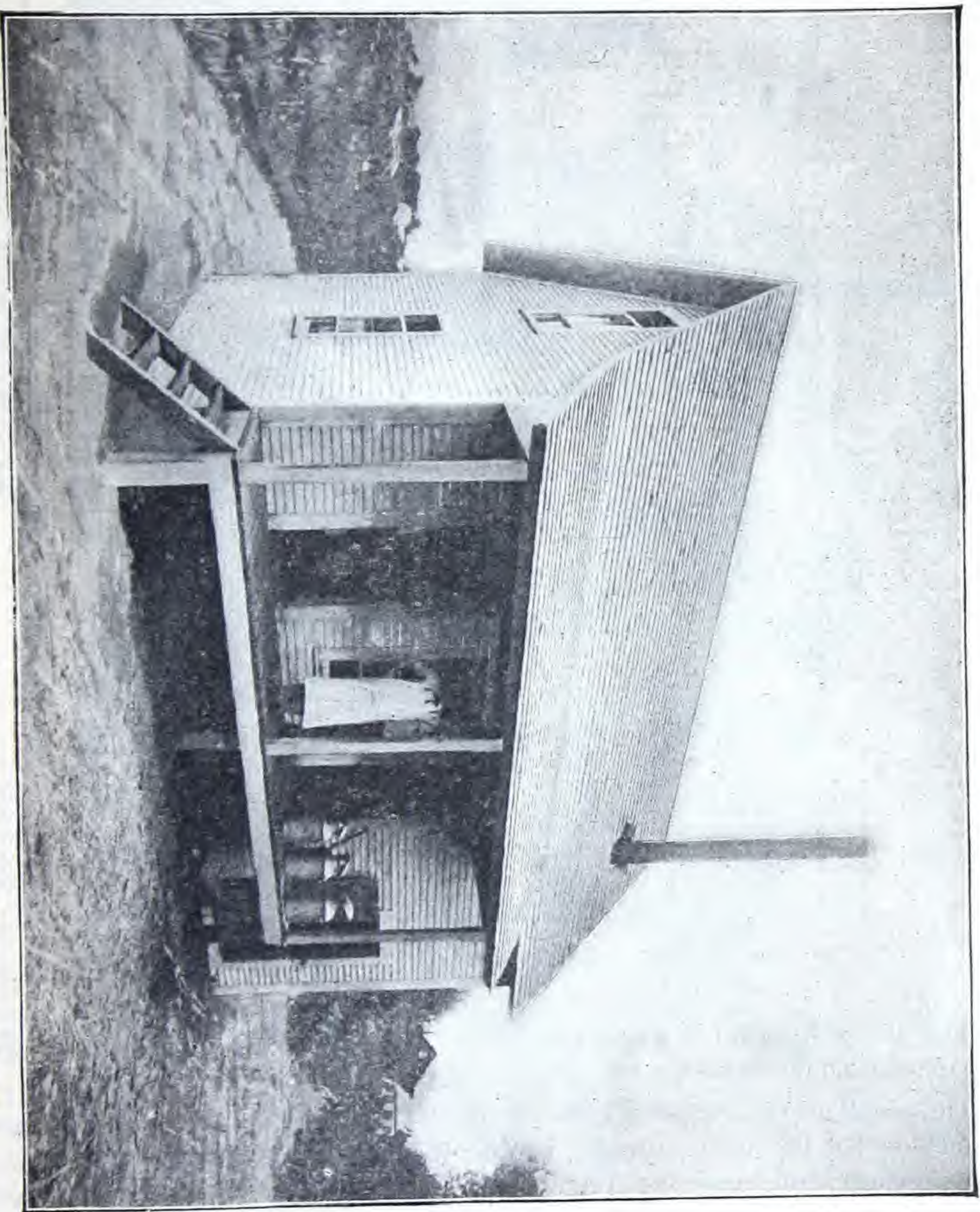
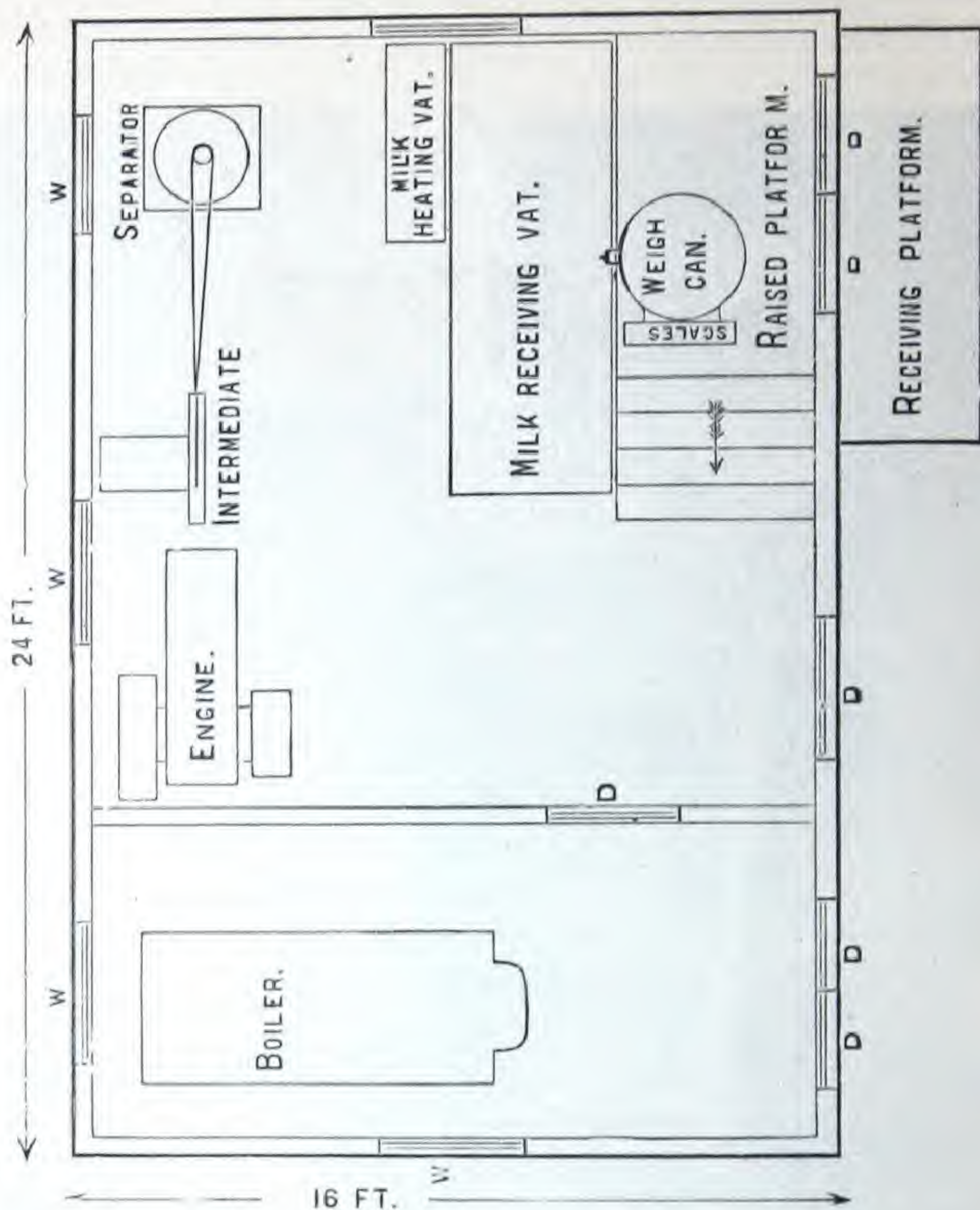


Fig. 28. SKIMMING STATION, EAST RYEGATE CREAMERY.

Fig. 29. SKIMMING STATIONS.

The above is a plan of an economical arrangement of an outfit where the cream is separated from the milk, and the cream carried to the main creamery.

These stations are becoming quite popular with creameries which are enlarging and branching out for more patrons. By distributing these stations as necessary quite a large creamery can be operated profitably in sections where the dairies are scattered.

It will be seen that a small building can be used and that only a small amount of apparatus is required. The engine can be belted direct to the Separator, thus doing away with shaft, hangers and pulleys.

We furnish large blue prints of the ground plan of this size station.

On the previous pages will be seen illustrations of East Ryegate Creamery, and a skimming station of the same creamery.

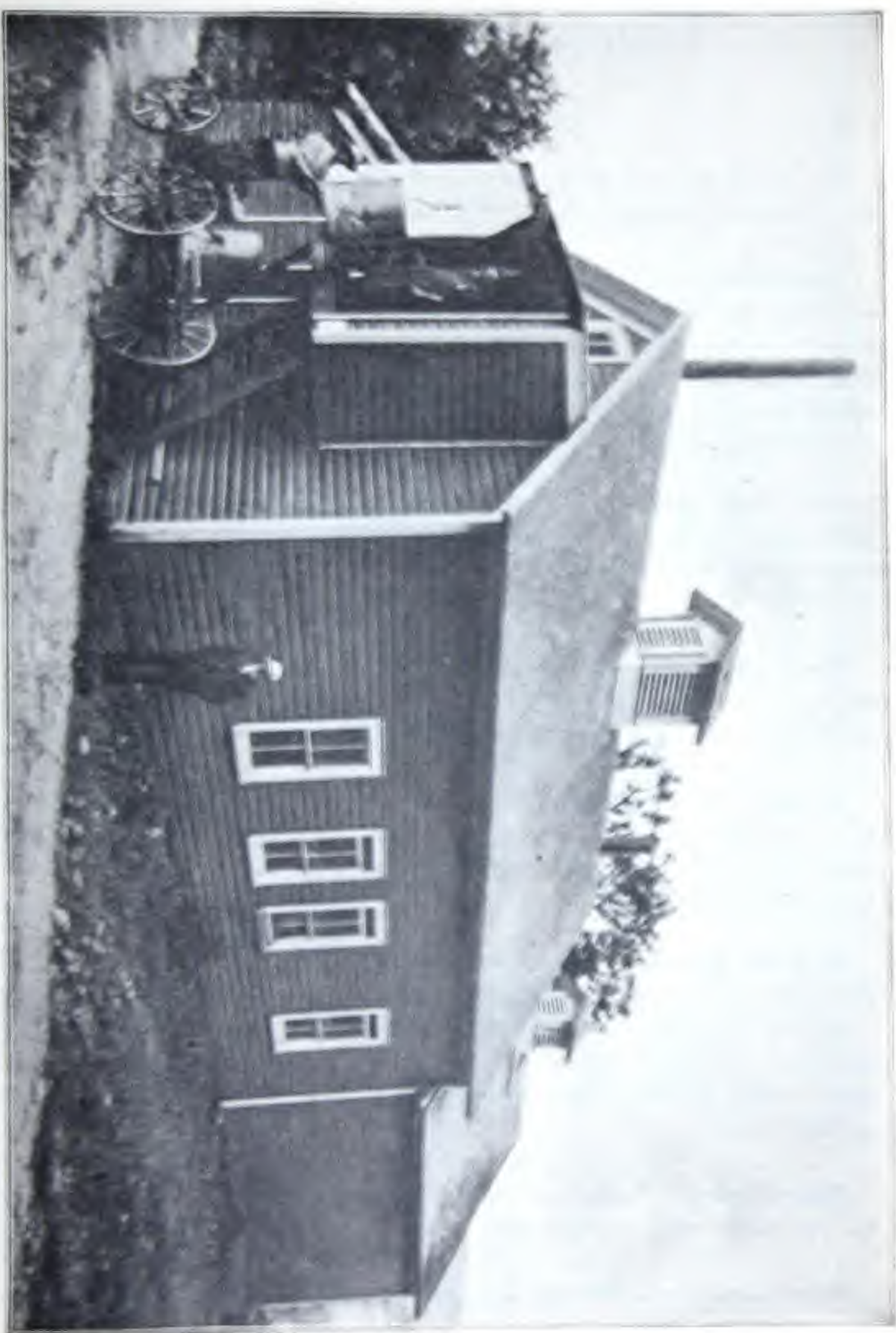


FIG. 30. QUAKER HASIN CREAMERY, DE RUYTER, N. Y.
Equipped by the Vermont Farm Machine Co.
Cost, only \$2,200 for Building and Outfit.

Showing the Manner of Receiving Milk in
Many New York Creameries.

Equipment of Creameries.

We invite all who are contemplating the erection of creamery plants to send to us for complete illustrated catalogues of all kinds of apparatus. We refer briefly to some.

Separator. The most important piece of machinery in the separator factory. In our Improved United States Separator we furnish a machine that does a very large amount of work and does the cleanest of skimming, two all-important points in a Separator. At the same time, another great advantage is its simplicity and fine workmanship, and it runs very easily, as shown by power tests at Vermont and Wisconsin Experiment Stations.

Vats. We furnish the best vats on the market. Our standard cream vats are made with round bottoms, strongly braced so that they will not cripple, and require no extra rods to hold them together. We also make Milk Receiving Vats, Tempering Vats, etc., etc.

Butter Worker. We recommend our V. F. M. Power Butter Worker for creamery use. It is the best Worker on the market and is giving excellent satisfaction. We also furnish the large Workers for handling a very large product.

Churn. We furnish the Square Box Churn made of either oak or pine, and the cover that we put on is the best and safest fastening made. Our Churns are well made, of a good quality of lumber. We also have the Davis Swing Churn for factory use, and the Barrel Churn.

Babcock Tester. Our Steam Motor Babcock Tester, for factory use, is the most complete, convenient and efficient Tester on the market. The bottle-head of this Tester is balanced. It is fitted for the use of a speed indicator, and has a steam gauge to determine the pressure. It is so constructed that the required speed is attained with the least possible expenditure of steam. Every factory should have one of these Testers.

Miscellaneous Articles. We supply all the utensils for use in a creamery, and they are shown in our catalogues.

Quotations for Different Capacities. We are pleased to furnish lists of apparatus needed for different capacities of creameries, upon application, and are glad to give prices on any special apparatus wanted. Write to us.

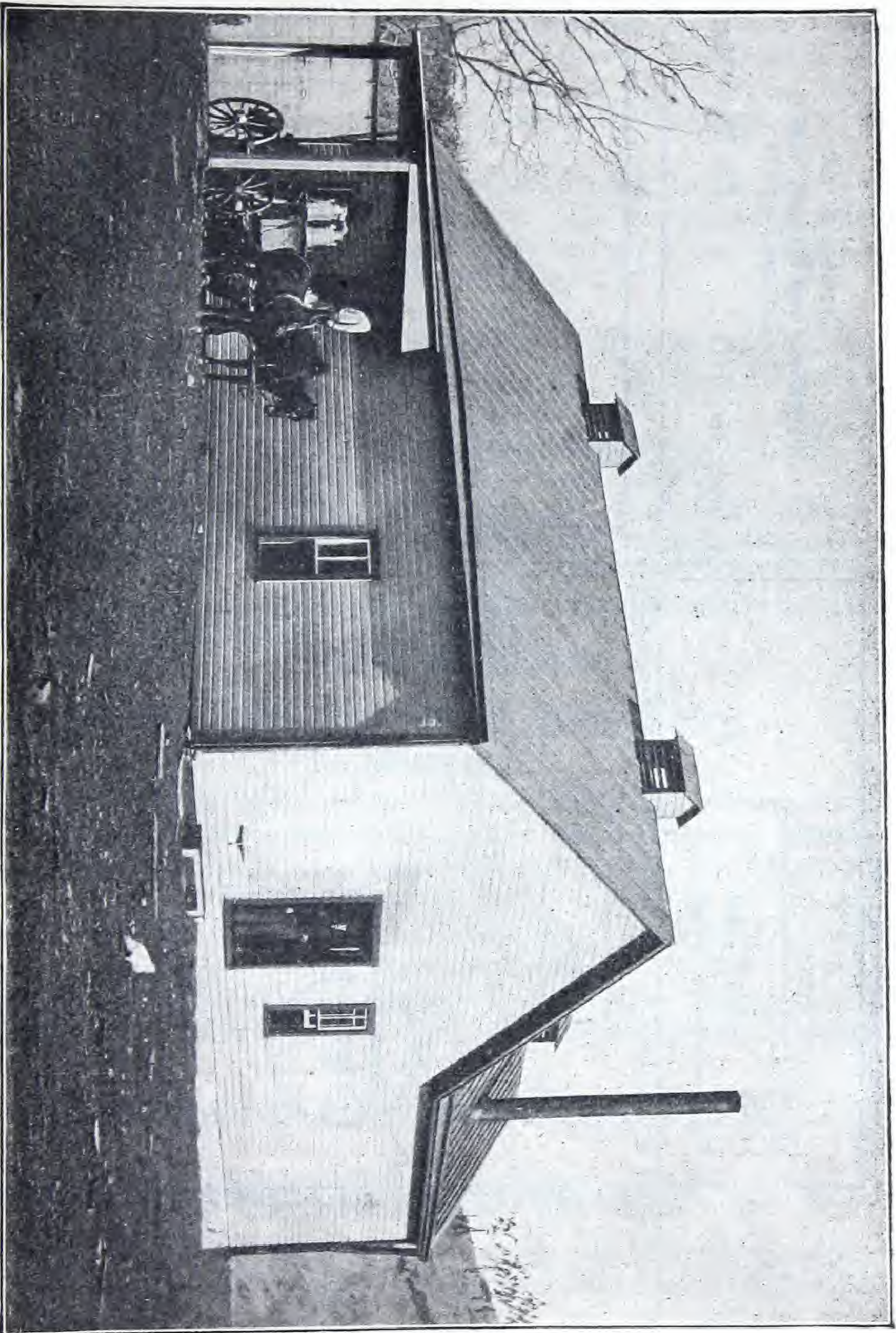


Fig. 31. ADENA CREAMERY, ADENA, OHIO.
Equipped by the
Vermont Farm Machine Co.
An Ohio Creamery Costing only \$2,265
for Building and Equipment.

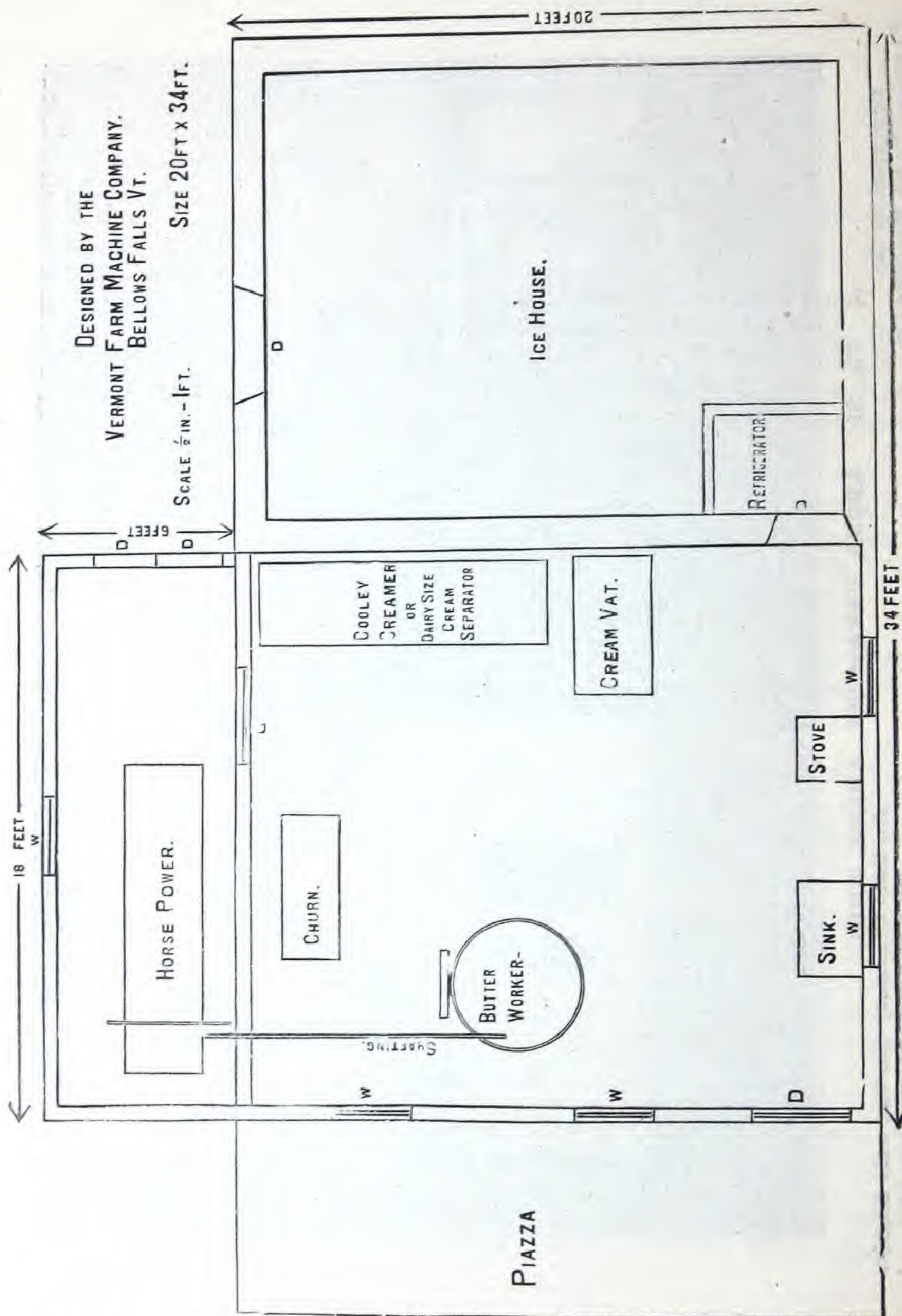


Fig. 32. GROUND PLAN OF A MODEL DAIRY BUILDING.

Model Dairy.

The illustration on the opposite page represents a model dairy building with ice house attached, and the arrangement is such that it can be used with either a Cooley Creamer or a Dairy Size Separator. When the Cooley Creamer is not used the Separator is located in the same position as the Creamer and a counter-shaft will be required. The counter-shaft will be connected with the main line of shafting by a belt when this arrangement is used.

With the Cooley Creamer it is desirable to have the bottom of the ice house about three feet higher than the floor to the dairy room, and a tight floor put in the ice house slanting to one point, so that all the drippings from the ice may be accumulated and run into the Creamer, thus using all the ice after it is melted.

A refrigerator is illustrated in one corner of the ice house.

When an engine is used instead of the horse power to operate the Churn and Butter Worker it can be located in the lean to in the same position that the horse power is represented, and the balance of the room can be used for fuel.

The ice house has a capacity of fifty-five tons if the posts are twelve feet high. The ice house is 14x18 feet inside. The dairy room is 17x19 feet inside.

The building should be erected using dead air walls as described elsewhere herein.

If preferred, a small boiler may be used in the dairy room instead of the stove, as illustrated.

A water tank should be located overhead which may be supplied with water from a spring or by a pump operated by the power.

West Braintree Creamery.

See Next Page.

Fig. 33 shows a small, low-priced creamery building, having a capacity for about 400 pounds of butter a day. Is conveniently arranged, so that one man can operate the creamery to excellent advantage. The weigh can is on a platform three feet above the creamery floor. The milk flows from the weigh can to the receiving vat, is pumped from there into the heater, thence it flows to the separator. The cream flows into the cream vat from the separator, and is dipped from there into the churn. The cold storage room is conveniently placed in one corner of the building. Engine and boiler are in a lean-to. The milk is handled by gravity as far as possible in this creamery.

Wolfboro (N. H.) Creamery,

ALSO

North Orange, Mass.

This plan of creamery (Fig. 34) is one of the most popular in New England for the separator system. The separator, weigh can and cream vats are all on a floor three feet above the churning room floor. The milk flows from the weigh can into the receiving vat, is pumped from there into the tempering vat, and flows from there into the separator. The cream flows from the separator into the cream vats, and from there, after ripening, into the churn. The arrangement of the creamery is such that the butter maker can receive the milk, look after the separator, and have his eye on the engine and boiler, all at the same time. The ice house is across the driveway from one end of the building.

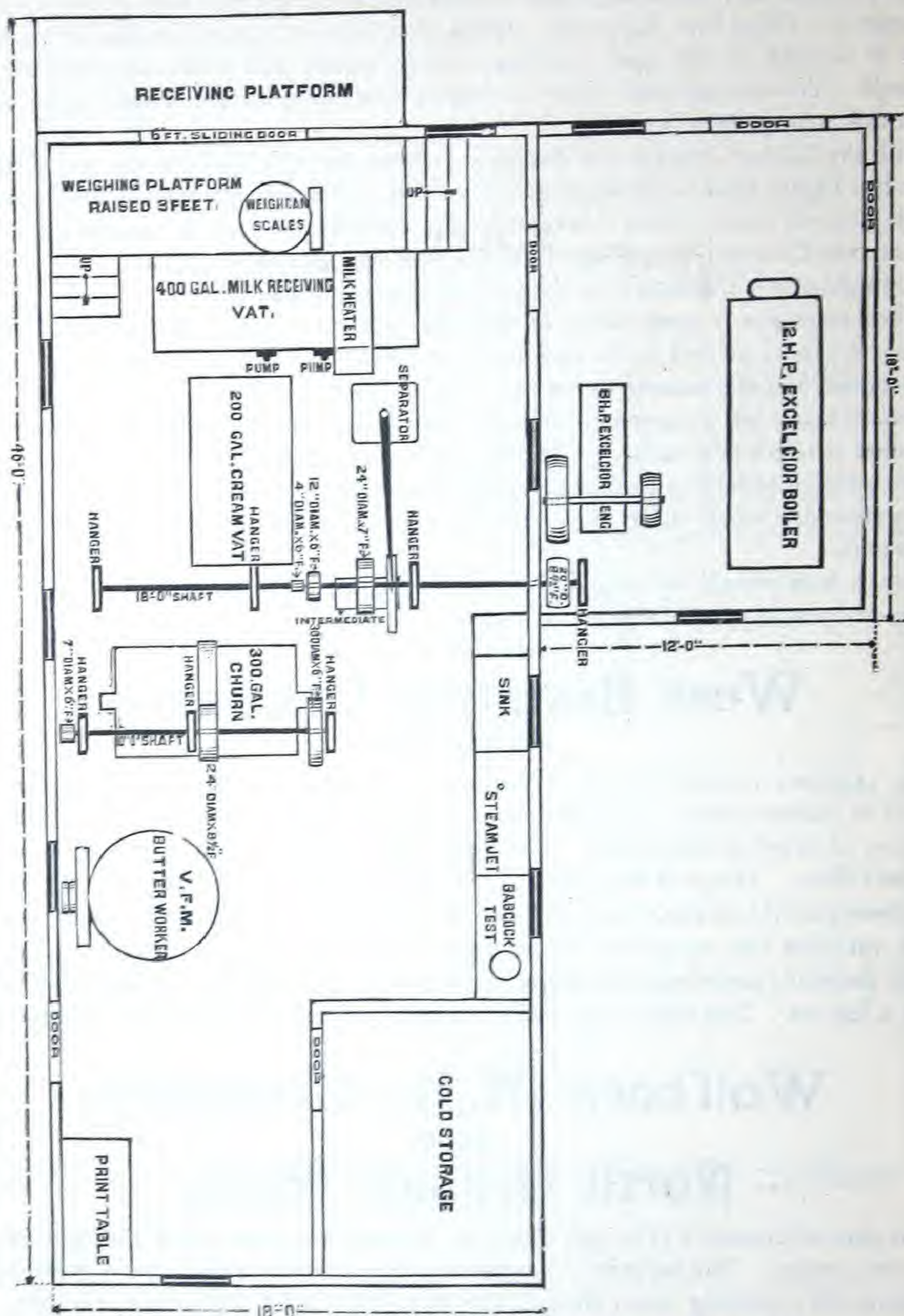


Fig. 33. WEST BRAINTREE (VT.) CREAMERY.

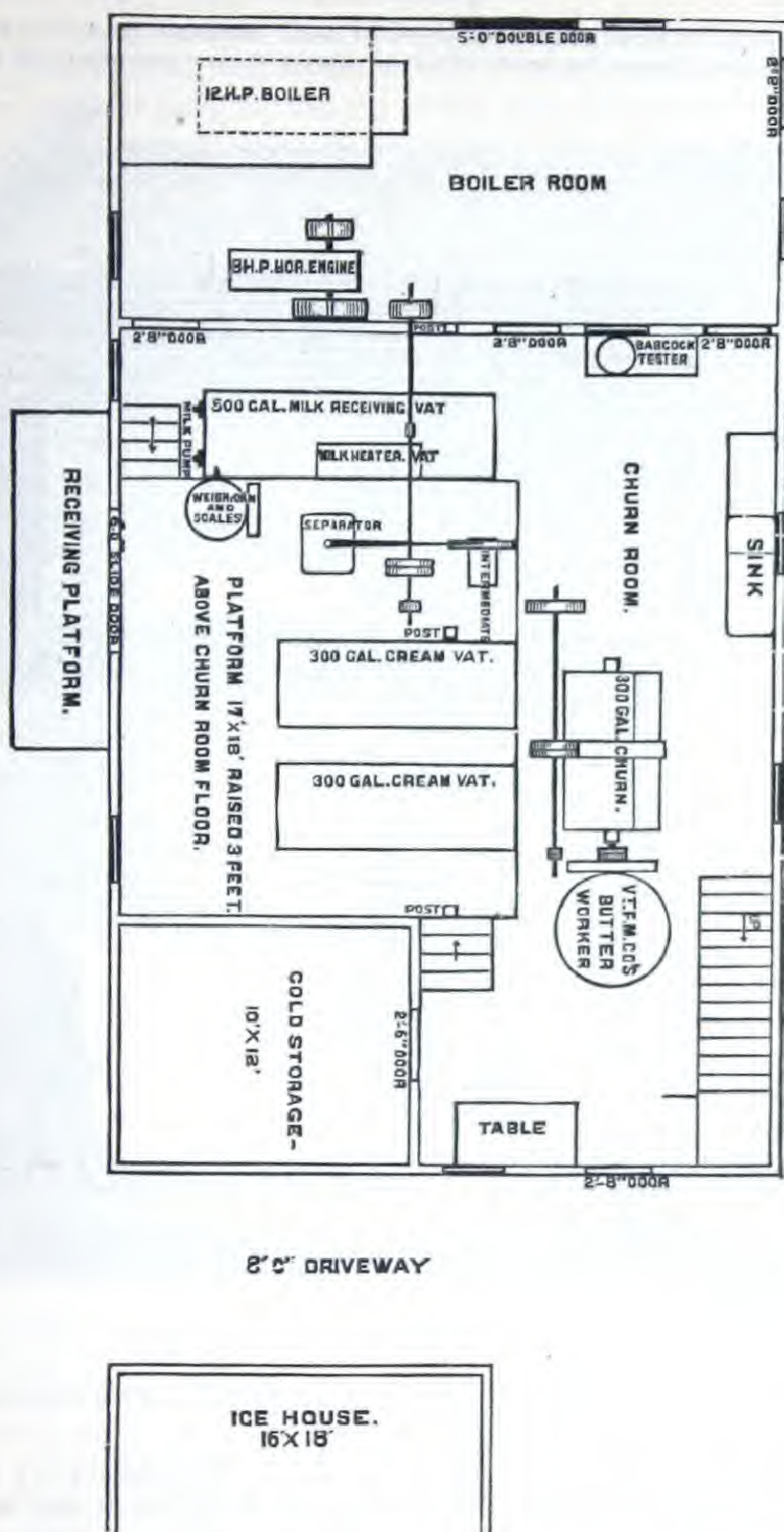


Fig. 34. Wolfboro (N. H.) and North Orange (Mass.), Creameries.

Cold Storage.

We have large drawings of this plan of Cold Storage which we furnish, without charge, to those who purchase their apparatus of us.

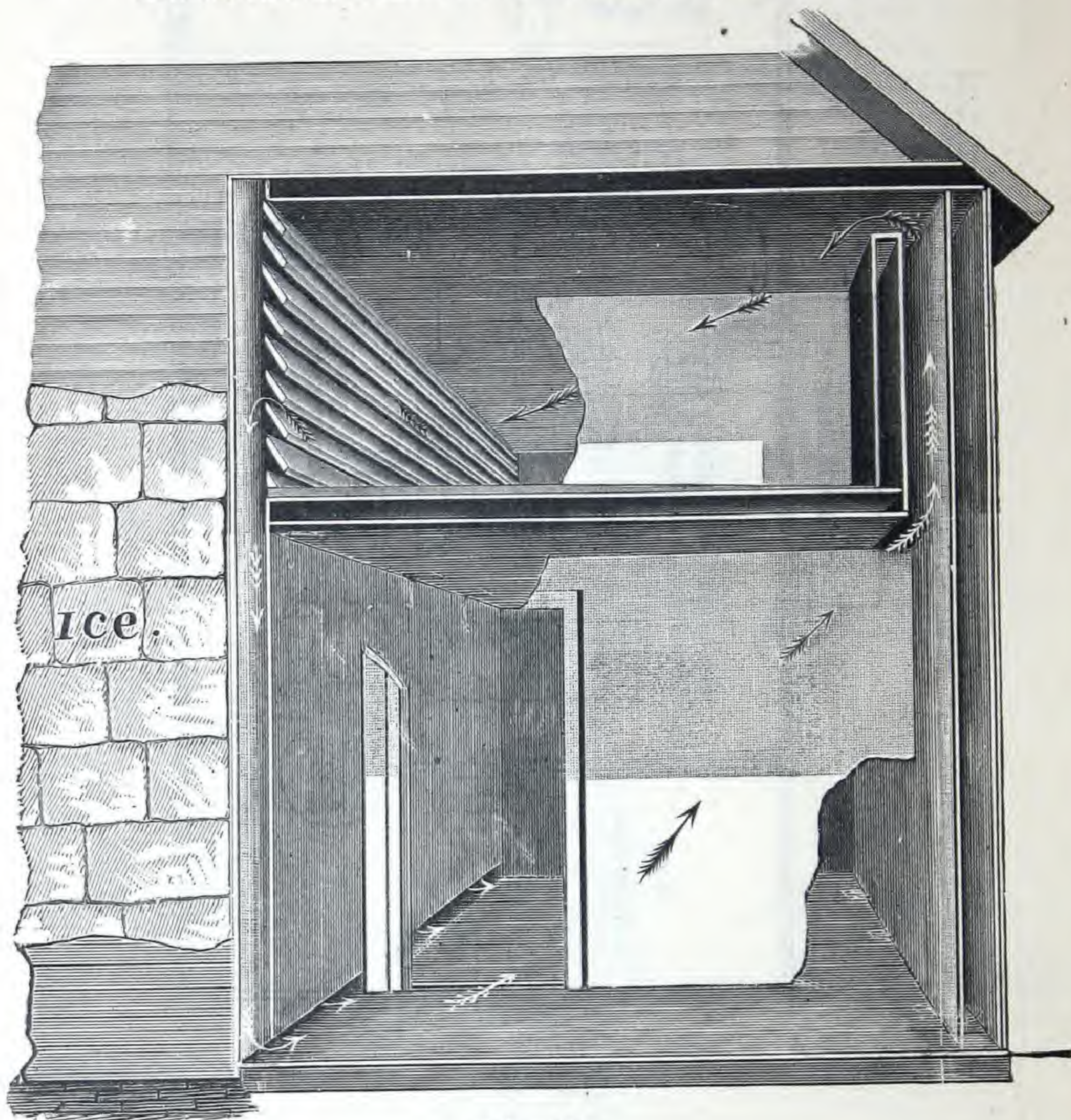


Fig. 35.

The plan shown above is used in a number of creameries with success. It may be varied in size to suit the requirements of the builder.

In this plan the room is made 10x12 ft., and divided equally by a partition, as shown. An ice box 10 feet wide, 12 feet long, and as high as it can be made under the rafters, is put over the room, and connected with the room below by flues constructed in the wall. These flues may be simply the space between the studs and joists, and must receive the air at the *ceiling*, on one side of the room, and be connected with the *top* of the ice-box. These flues conduct the warm air which is at the ceiling into the ice-box. From the sides at the bottom of the ice-box, flues run down all the spaces between the studs to within six inches of the floor and enter each room.

These carry the air after it is cooled in the ice-box to the room below. This circulation is kept up by the air coming in contact with the ice above where it is cooled and becomes heavy, and returns by its weight to the room below. The same arrangement of flues is in each room of the cold storage.

A slide should be put in the flue conducting the cooled air from the ice-box to the floor, so as to regulate the temperature, or cut off the cold entirely.

The rooms must be tight, so that no air can enter them from the outside, also the flues must be tight, so as to allow no air to enter them except from the ice-box and ceiling of storage rooms.

The bottom of the ice-box must be covered with galvanized iron turned up three inches on all the sides, and have a drip-pipe to carry off the melting of the ice. This drip-pipe must have a trap so no air can enter from the bottom. The air flues leaving the box from the sides at the bottom must be arranged so that no ice or water can get into them.

The ice-box has a partition across it corresponding to the partition in the storage. There must be a thick covering to the box. No air must be allowed to enter the ice-box except through the flues. There is one lid to each ice-box for putting in the ice.

If the ice-box is not made the full width of the cold rooms the floor over the cold rooms which is not covered by the ice-box should be covered with galvanized iron, laid so as to run the melted ice placed on it into a drain, and carry it off through a drain pipe. This pipe must also be arranged so that no air can get into the lower end. Paper should be put in under the galvanized iron everywhere, to prevent condensation, and consequent drip. Great care should be taken that everything is tight about the cold storage, especially the flues and doors. Put two-inch pieces all around on inside of ice-box, also on the bottom, so as to give free circulation of air between the ice and the sides of the box.

A door may be put in between the work-room and the ice-house over the cold-storage next to the ice-box, so the ice may be taken direct from the ice-house to the creamery.

The illustration on opposite page will show how everything is arranged, and if properly constructed the rooms will be dry and the air pure and cold as may be desired.

Over the storage rooms use 3x8 inch joists, 18 inches apart, and put on a double floor, or use 1½ inch flooring, slanting to the drain, and cover with galvanized iron.

This plan of cold storage may be altered so as to have the ice-box cover only a portion of the cold storage room if desired. The advantage of having the ice-box cover the whole of the cold storage rooms, as shown in the cut, is to allow a large body of ice to be put in at one time, that will last several weeks or months without refilling. The arrangement of the air ducts would be the same as in the cut, that is, the warm air passes from the cool room up through the flues at the ceiling and discharges over the ice, and when cooled returns by its own weight through the flues on the opposite side of the cool room.

The cover to the ice-box should be made the same as the walls that surround the cool room. The walls to the ice-box may be as high as the roof of the ice-house will allow. It will be necessary to use strong heavy timbers to support the ice when the ice-box is constructed in this manner.

Remember that the VERMONT FARM MACHINE COMPANY furnish everything for the DAIRY or CREAMERY.

Plan for Construction of Ice House.

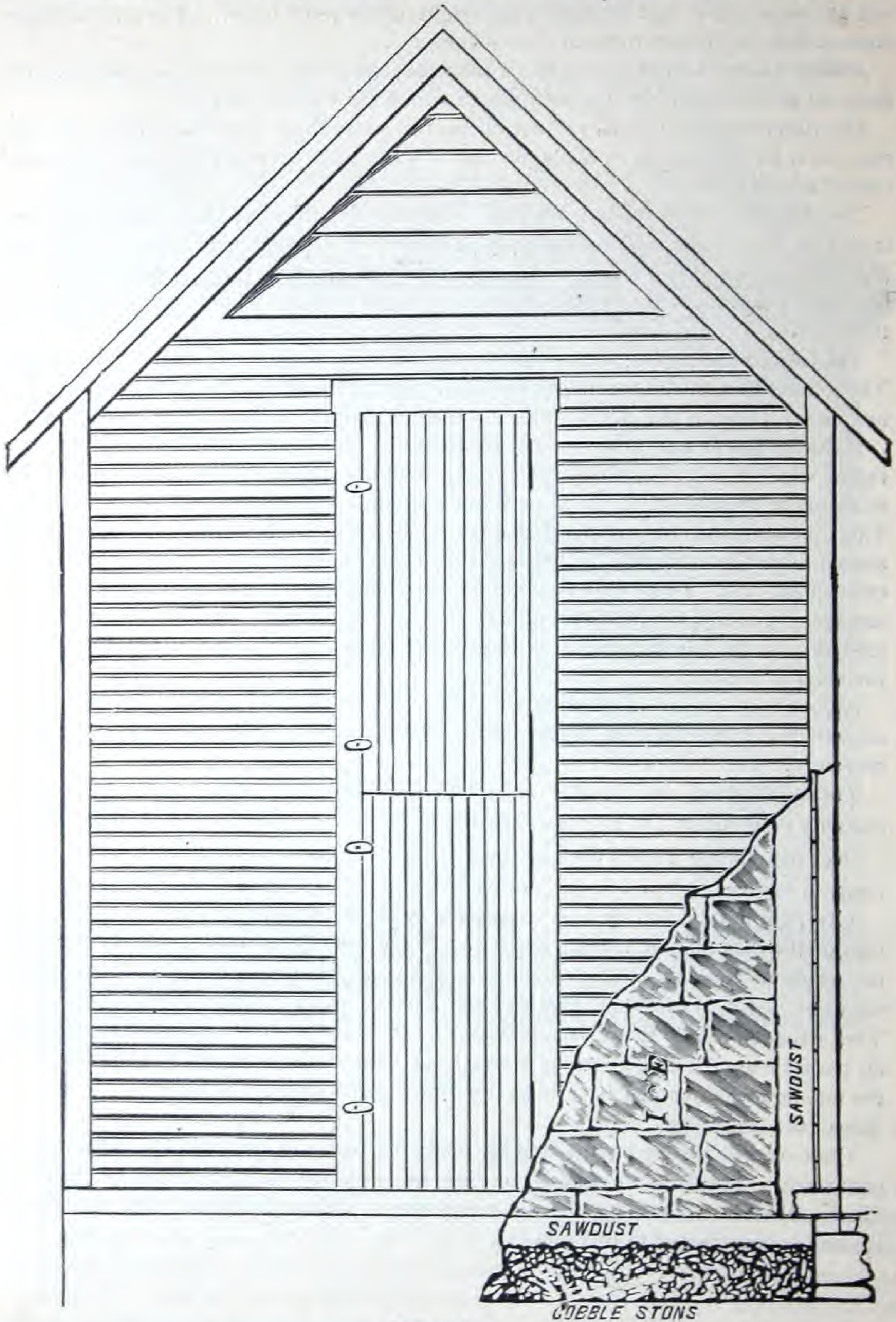


Fig. 36.

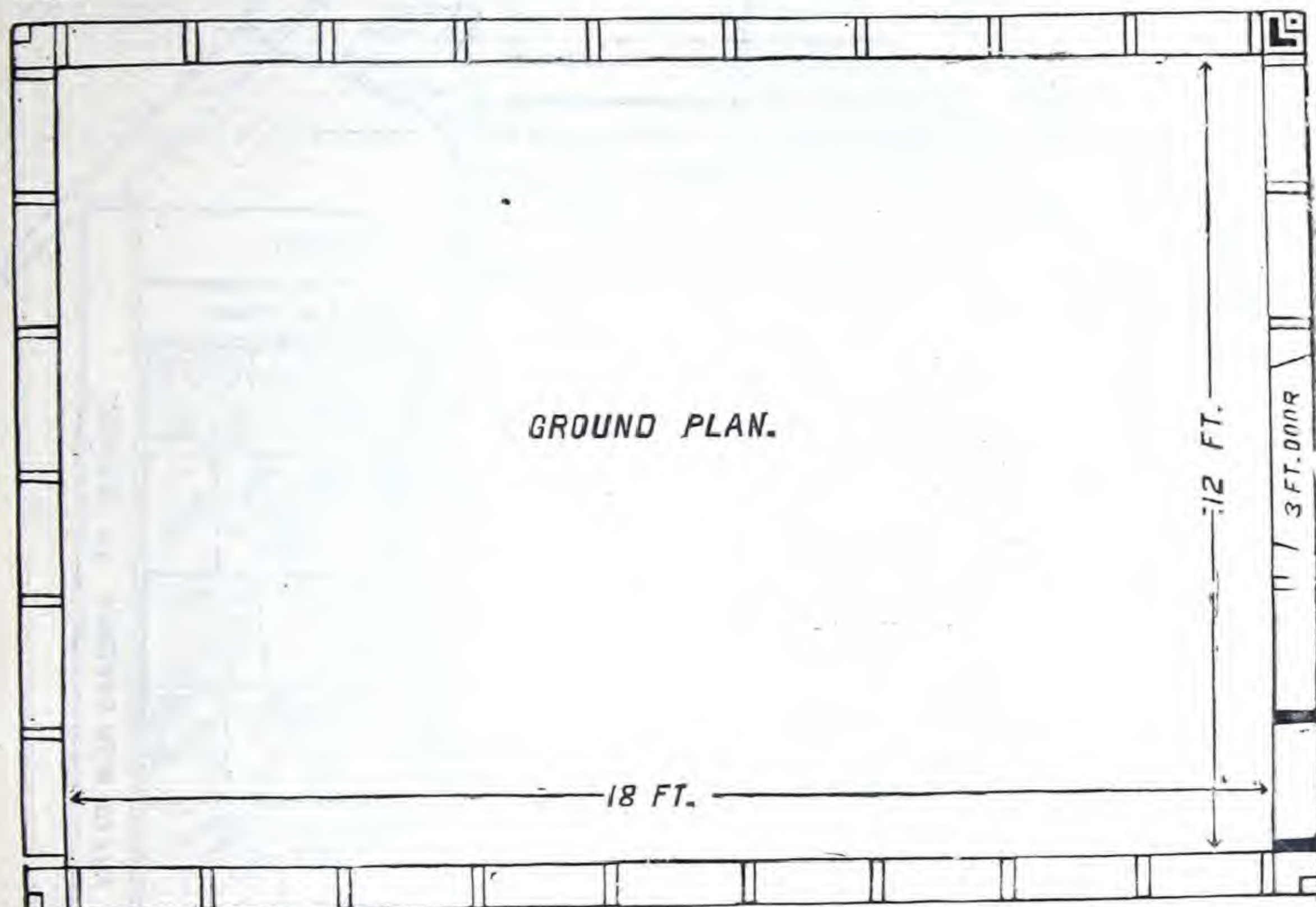
This cut shows a building constructed with a six-inch dead air space on the outside and a space inside of that next to the ice of nine inches, to be filled with sawdust.

The floor is made of fifteen inches of small cobble or broken stone at the bottom, with six inches of sawdust on top of them. This gives good drainage and does not allow the air to enter from the bottom. The top of the ice is simply covered with sawdust. The gable ends have ventilators and should be of sufficient opening to give free circulation of air. The manner of construction of the door for easy filling is shown in the cut.

Fig. 37.

Fig. 37 shows the ground plan of the above described building.

This building has eighteen ft. posts, and holds when full one hundred and fifteen tons.



How to Make Dead Air Walls for Refrigerators, Ice Houses or well Made Creamery Buildings.

First have all the studding in the walls set and nailed firmly in their places. Between each of the studs, midway of their width, put long strips of thick building paper. Fasten the upper end to the plait or trimmer overhead, with a thin strip of lath nailed with shingle nails. Fasten the bottom end of the paper to the sill in the same way; then each side should be fastened to the studding with lath as described; continue this between all the studding in the walls of the building. Then cover the outside of the studding with paper. On top of this paper fur out one inch with 2x1 inch strips of boards nailed onto each stud. On top of these strips cover the entire walls with one-inch boards well nailed.

Cover the boarding with paper and then clapboard. Drop-siding may be used instead of clapboards if desired.

Next cover the studding on the inside with paper and sheathe up tight with matched boards. Be sure there are no cracks at the top or bottom of these dead air chambers to let in the air, as this will defeat the object you are working for. The floor should be tight with no circulation of air under it. In the ceiling overhead there should be a dead air space having paper on both sides next to the boarding.

Another Plan for Ice House.

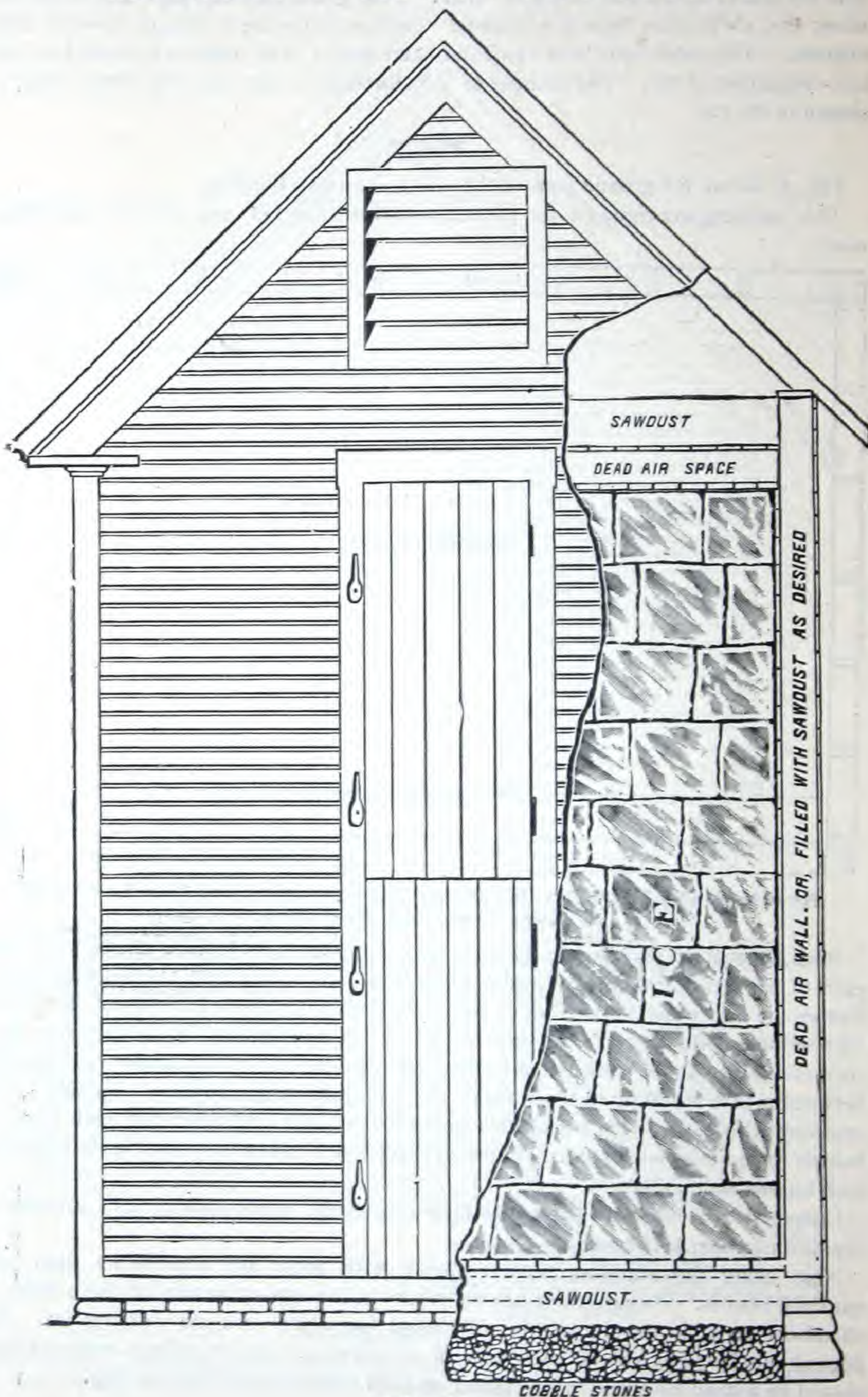


Fig. 38.

Fig. 38 represents an ice house constructed with walls of dead air chambers only. The ice is packed without any sawdust coming in contact with it. The ice is protected by the non-conducting walls and ceiling of the building. These dead air chambers are formed as described under Fig. 37. Bear in mind that the dead air spaces must be tight and the more there are of them the better the ice will keep. The arrangement of stone and sawdust at the bottom is the same as described and illustrated in Fig. 36. The ceiling overhead has the same air spaces as the sides with a foot of sawdust on top. This plan of an ice house is intended to keep ice without putting any sawdust or other covering directly on it.

In this plan another style of ventilation is used. It has the same convenient doors for filling.

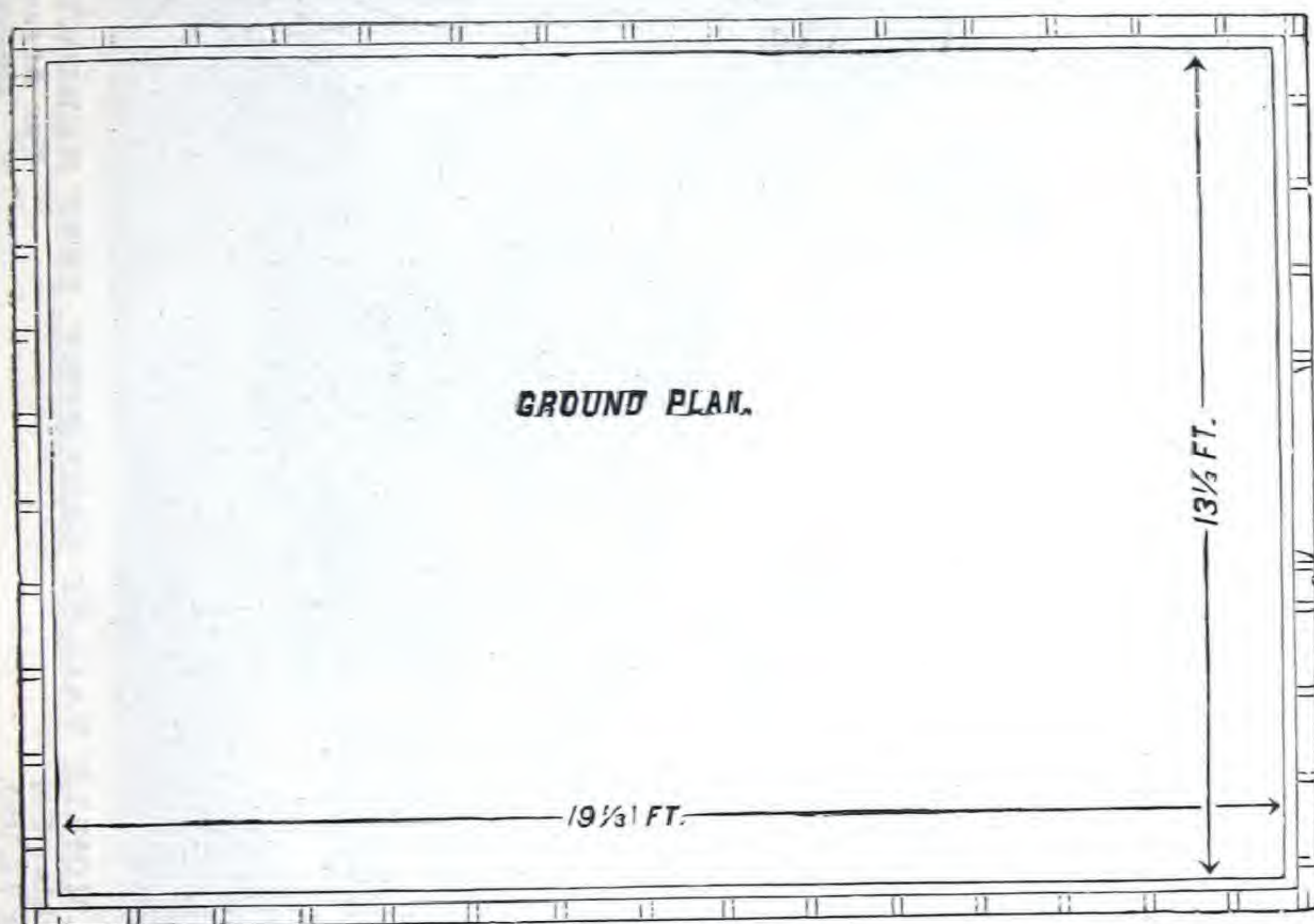


Fig. 39.

Fig. 39 is the ground plan for this ice-house. The doors are three feet wide and should be built with the same dead air spaces as the walls and fit tight. This building has a capacity of about one hundred and thirty tons.

In building an ice house two things are very necessary for the good keeping of the ice. They are, good drainage without any possibility of air getting into the bottom, and good ventilation over the sawdust covering the ice. If your ice is well covered there is no danger of too much air, but the rain must be excluded.

In the large ice houses now care is used to avoid letting the sides and edges of the cakes touch. This precaution is taken so the ice will come out easily the next summer without breaking up the cakes. People have many different ideas in regard to putting up ice, but if the ice is well protected on the sides with dead air spaces or sawdust and there is good ventilation with good drainage and no air allowed to enter at the bottom, there is no trouble in keeping it.

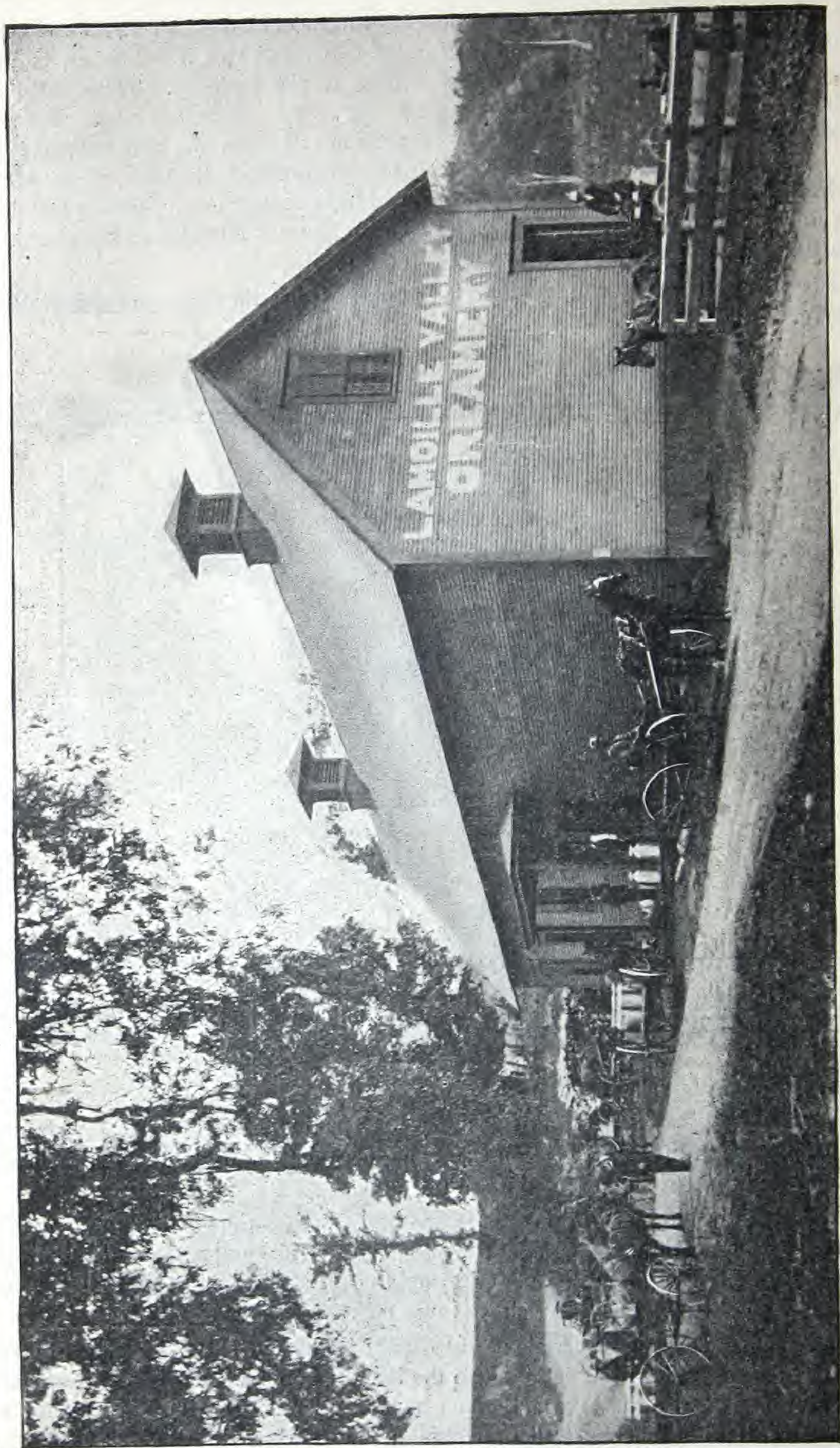


Fig. 40. LAMOILLE VALLEY CREAMERY, EAST HARDWICK, VT.
Equipped by the Vermont Farm Machine Co.
Cost of Building and Machinery, only \$2,700.

For Arrangement of this Plant, see Fig 3,
Ground Plan Silverdale Creamery.

...referred to 'S. O. Eaton' and with other
 out no one has told that no person do not
 ...referred to 'S. O. Eaton' and with other

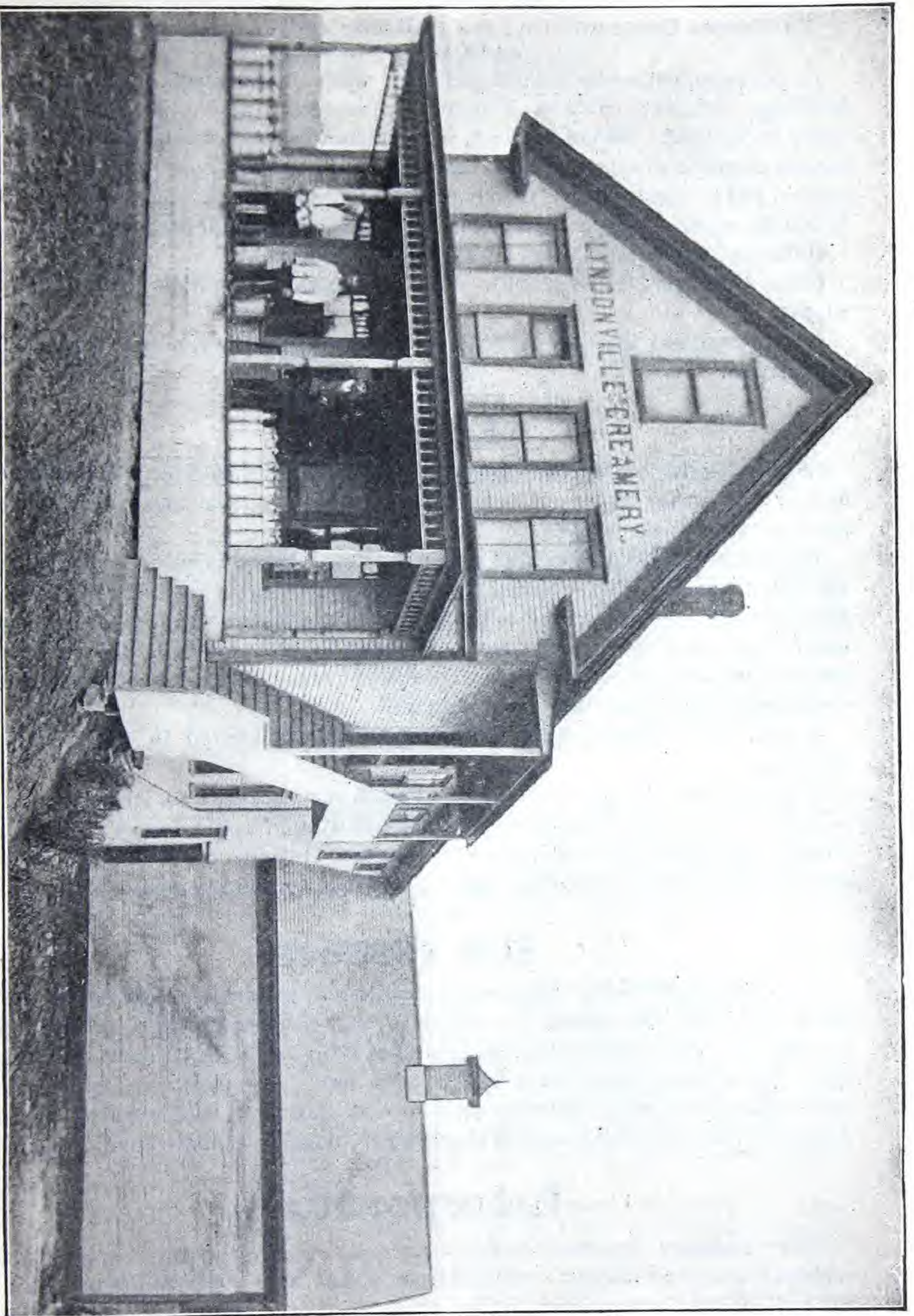


Fig. 41. LYNDONVILLE (VT.) CREAMERY.

Originally intended for Cream Gathering.
Now operated on that plan and also on the
whole milk plan, using U. S. Separator.

Many of the patrons use Dairy Size
United States Cream Separators.

Special Notice

To Parties Contemplating the Building and Furnishing of Creameries and Cheese Factories.

In this pamphlet we have illustrated many styles of the most conveniently arranged buildings. We have endeavored to give so complete a description that they can be easily understood. **When desired, we contract to erect the buildings.** We also furnish complete working plans, so that they can be easily erected by any local contractor, and at a less expense than is possible for a contractor from a distance to do it. When the apparatus is purchased of us we make no charge for architect's plans.

Ordinary Creamery Buildings cost from \$300 to \$700.

Good Creamery Buildings with dead air spaces in the walls cost from \$500 to \$1,500.

If contemplating starting a Creamery or Cheese Factory, please write us for full information.

Location.

In selecting the location for a creamery building care should be taken to locate it as near a center for all patrons as possible. This is of special importance in creameries where whole milk is taken.

The creamery should be located near some living stream of water, so that the drainage of the creamery will be carried off. If the water from a good flowing and never failing spring can be conducted to the creamery it will save the necessity of pumping water from a well and save the cost of a pump in first equipping the creamery. A spring of water is not necessary for a creamery. Many of the largest and best creameries pump all the water they use from a well.

A tank for holding a supply of water should be located in the garret of the creamery.

If plans shown in Figs. 10 to 16 are adopted, it is necessary to locate the creamery on a side hill, but we recommend the plans illustrated in Figs. 26, 33 and 34 as preferable, and also the plan shown in Figs. 1, 2 and 3 is quite popular; and if these plans are adopted, a location should be selected where the ground is reasonably level.

Ice Houses.

The ice house should be constructed according to the directions given in this catalogue, but the size should be varied to suit the requirements of the different creameries. The average creamery should have an ice house of about 150 tons capacity. Ice weighs about 55 pounds to the cubic foot. The dimensions of the ice house to be built can be easily determined from this standard. We recommend that ice houses be built in connection with the creamery building as illustrated in Fig. 3.

Incorporation.

Every creamery company should become incorporated as soon as possible after a sufficient amount of capital stock has been subscribed. This will relieve the stockholders, in most states, from individual liability from future assessments after the stock subscribed has been paid in. It is usually desirable to consult an attorney in regard to incorporating, in order that the papers may be properly and legally made out.

How to Organize and Conduct a Co-Operative Creamery.

Order of Business.

1. Roll Call.
2. Reading Minutes.
3. Report of Secretary.
4. Report of Treasurer.
5. Report of Superintendent.
6. Report of Standing Committees.
7. Report of Special Committees.
8. General Order of Business.

By-Laws.

FIRST.

This Association shall be called the — — — Co-operative Creamery Association of — — —.

SECOND.

The purpose of the Association shall be to locate, establish and carry on the manufacture and sale of milk products in such a manner as will conduce to the greatest convenience and profit of the producers — — —. Also to purchase, use and hold real and personal estate necessary for the transaction of the business of the Association.

THIRD.

The capital stock of the Association shall be — — — dollars, divided into — — — shares, of — — — dollars each; said shares drawing interest at — — — per cent per annum, no one person holding more than — — —.

FOURTH.

Cream or milk may be purchased, or accepted from any person not a stockholder, on the same terms and conditions as may be prescribed for stockholders.

FIFTH.

Any person may become a member of this Association by taking one or more shares of the Association.

SIXTH.

The annual meeting of the corporation shall be held on the first Thursday of — — — in each year, at such hour and place as the board of trustees may determine, and due notice of such meeting shall be given by a written or printed notice, signed by the secretary of the corporation, and sent through the post-office at least ten days prior to such meeting, to each stockholder of record appearing on the books of the corporation, at the address given in such books; and public notice of the time and place of holding such meeting and the election of trustees shall be published not less than ten days previous thereto in a newspaper printed in the vicinity of the place where the operations of the company are carried on.

Special meetings may be called, either by the president, with the advice and consent of a majority of the trustees or directors, or shall be called upon written request of persons owning not less than one-third of the capital stock of the corporation.

Said meeting shall be held at such time and place as a majority of the trustees or directors may determine, and notification thereof shall be given by mail and publication in all respects as hereinbefore provided in the case of annual meetings; but at all such special meetings of stockholders, at least one-half of the shares of the capital stock held by the company must be represented to constitute a quorum; and neither at any annual or special meeting shall any stock held by the company be voted upon.

SEVENTH.

1. The officers of the Association shall consist of a president, vice president, treasurer, secretary, recording secretary, ——— trustees or directors, and two auditors.

2. The president shall be chosen annually by the board of trustees or directors, by ballot, at the first meeting after the election, except in case of a vacancy.

3. The secretary and treasurer shall be elected by the trustees or directors. And all officers shall hold office till others are chosen and qualified in their stead. Vacancies in above named offices may be filled at any meeting of the stockholders, in the meantime by the board of trustees. In case of the absence of the secretary a temporary secretary may be chosen in his stead.

EIGHTH.

At any meeting of the board of trustees or directors, a majority of the members thereof shall constitute a quorum for the transaction of business. A less number may adjourn from time to time.

NINTH.

It shall be the duty of the president (who shall be a trustee or director) to preside at all meetings of the Association and of the board of trustees or directors, preserve order therein, put all questions, announce all decisions, and in case of equal division, to give the casting vote. He shall receive and safely preserve all bonds required of the officers of the Association, and sign all certificates or documents issued by the Association or board of trustees or directors. In the absence of the president it shall be the duty of the vice president to preside at any meeting, and in his absence, one of the trustees or directors.

TENTH.

It shall be the duty of the secretary to attend all meetings of the Association, and of the board of trustees or directors, and to keep a correct record of the same, which record shall be open for the inspection of any member. He shall give notice of all meetings, and of all appointments on committees to each member thereof, and to each officer chosen, of his election, and shall serve all such other notices as appertain to his office, or as may be directed from time to time by the Association or board of trustees or directors. He shall attest all certificates or documents issued, signed by the president; shall file all reports and such other documents as may be ordered to be filed, and shall carry on all such correspondence as may be directed; shall act as secretary of all committees when called upon.

ELEVENTH.

The treasurer shall have the custody of, and be responsible for all moneys, papers, books and accounts of the corporation, save only such papers, books and records as are herein otherwise directed to be kept by the secretary; subject always to the control of the board of trustees or directors. He shall deposit all funds of the company which may come into his hands in such bank or banks as the trustees or directors may designate; he shall keep his bank account in the name of the company, and shall exhibit his books and accounts to any stockholder upon application at the office at any time during ordinary business hours; he shall endorse for collection the bills, notes, checks and other negotiable instruments received by the company, making record of the same in the books of the corporation; he shall sign all bills, notes, checks and other negotiable instruments of the company only as herein otherwise provided; he shall sign all certificates of stock of the company; he shall, under the direction of the board of trustees or directors, sign all orders for the payment of money, and pay out money as the business of the corporation may require, taking proper vouchers therefor; and shall, under the direction of the board of trustees or directors, give or negotiate such notes and bills as may be required in the business of the corporation. He shall also record all transfers of stock, and cancel and preserve all certificates of stock transferred; and at each annual meeting of the stockholders shall present a full statement of the affairs of the company. He shall also keep a book containing the names, alphabetically arranged, of all persons who are stockholders of this company, showing their places of residence, the number of shares of stock held by them respectively, and the time when they respectively became the owners of such shares, and the amount of stock actually paid in; and shall generally perform all the duties of his office.

The treasurer, before entering upon the duties of his office, shall execute to the com-

pany such bonds for the faithful performance of his said duties as the board of trustees or directors may direct.

TWELFTH.

It shall be the duty of the board of trustees or directors to attend to the general affairs of the Association, invest the funds of the same, appoint such other agents or officers as in their judgment the interests of the Association require, and fix all compensation. They shall keep or cause to be kept, a correct account of all cream or milk furnished by stockholders or patrons, and a correct account of all sales. They shall prescribe the rules and regulations governing the collection and delivery of cream or milk; may cause the quality of the same to be tested as often as may be deemed expedient; may authorize the premises of any stockholder or patron to be inspected, and may reject or refuse to collect or receive any cream or milk that is unsatisfactory, or not furnished in compliance with the prescribed regulations. They shall in all cases pursue such measures as, in their judgment, will tend to the best interests of the Association. They shall make a full report of their doings, and a full statement of the business at each regular meeting, or whenever called on to do so by the vote of the stockholders.

THIRTEENTH.

The duties of the auditors shall be to audit all accounts of the Association, making a report to the board of trustees at the time of the regular meetings, and at such other times as they may require.

FOURTEENTH.

1. The trustees or directors shall procure a corporate seal.
2. In case shares are transferred by one person to another, the certificate thereof must be surrendered to the treasurer, and by him canceled, and the board of trustees or directors shall cause another certificate to be issued to whom the transfer is made.

CERTIFICATE OF STOCK.

No..... Par Value, \$..... Shares.

Be it known that..... of.....

is the proprietor of..... shares of the Capital Stock of the.....

.....CREAMERY ASSOCIATION

OF.....

subject to the provisions of the Charter and the By-laws of the Corporation; said shares being transferable by a conveyance in writing recorded in the books of the Corporation and the surrender of this certificate.

Dated at.....this.....day of.....A. D. 18 ..

Countersigned,..... Clerk,..... President.

*The Directors of the..... Co-Operative Creamery Association,
located at..... have followed the regulations of other
Creameries, and established the following*

Rules for Patrons

And Instructions for Cream Gatherers.

Feeding.

We insist upon only such food being given to cows as will produce the largest and best quality of cream. Turnips, onions, cabbage, or anything to injure the quality of the milk, cream or butter is prohibited.

Milking.

Cows must be carefully cleaned before milking to avoid odors that would taint the milk; also the hands of the milker must be clean. The milk must be strained through two strainers, one of them cloth, before it is separated, or before going into the creamer cans. Thorough cleanliness must be observed in everything. One hundred pounds of bad milk, or the cream from it, will injure the product of ten thousand pounds of good milk. After a cow has dropped her calf, the milk from that cow must not be used until after the tenth milking.

Separators or Creamers.

The cream separator or creamer must be kept in a place free from odors, and cleanliness must be maintained in their vicinity. The directions furnished by the manufacturer as to the care of the separator must be strictly followed. Cans and pails must be washed, then scalded, every time they are used. If Cooley Creamers are used, the water in the creamer should be as near as possible to 45 degrees in summer and 40 in the winter. The cans and tanks must be kept sweet and clean, and the water free from impurities and clear.

Separating in the Cream Separator.

It is preferable to separate the milk as soon as possible after it is drawn from the cows, in order to secure the best results in thoroughness of separation, and to prevent the absorption of odors and taints before being separated. It is not recommended that the custom be followed which is in vogue in some sections, of the milk being separated only once a day, keeping the night's milk until morning and then warming it and running it with the morning's milk through the machine. It is preferable to separate both night and morning, immediately after milking each time, to secure the best results.

Another bad practice, and one that cannot be allowed, is that, common with some dairymen, of separating the milk at night and leaving the separator without cleansing, then running the morning milk through, and afterwards, in the morning, giving the machine a thorough washing. (This can be done with the Improved United States Machine as well as with any other, if deemed advisable, but we strongly recommend dairymen to clean the separator thoroughly every time after it is used, especially in the summer time when the sediment that remains in the bowl is almost sure to become sour and taint the cream that is separated from the morning's milk.)

Setting Milk in the Cooley Creamer.

All cans must be filled full of fresh milk, so far as possible, and immediately placed in the tank. After cans are set in water they must not be disturbed.

Mixing Milk.

When the night's milk is kept until morning to be separated it should not be mixed with the morning's milk before separating, but each lot of milk should be run through the machine separately. Afterwards the cream can be brought to the same temperature and mixed thoroughly. If separated promptly the morning's milk will be at the proper temperature for the best separation. It will be necessary to warm the night's milk up to the proper degree before running it through the machine.

In using the Cooley Creamers the cans must not be partly filled at one milking and after standing long enough for the cream to begin to separate be filled with milk from another milking or with anything whatever.

Cream Gatherers.

Cream gatherers are forbidden to take any cream which is dirty, or for any reason, in their judgment, is not of satisfactory quality or condition, or which has been in any way so treated as to indicate that an attempt has been made to interfere with the proper and natural separation of the cream, or in violation of these rules.

Any patron found violating or neglecting any of these rules must at once be reported to some one of the board of trustees or directors, and his cream must not be taken again until he has satisfied the trustees that his neglect was for good reasons excusable, and if any patron shall more than once be so reported, it shall be deemed a sufficient reason for refusal to again receive his cream at all.

Cream gatherers are specially directed to take all possible pains to discover all violations or neglect of any of these rules, and strictly enforce them in every case.

The cream gatherers shall be particular to follow the instructions as laid out in the Babcock Test rules in regard to weighing and taking samples of the cream.

Patrons are requested to notify the board of trustees or directors if any cream gatherer is in any way delinquent or careless in his observance of these instructions.

General Remarks.

The foregoing rules and instructions are found by experience and observation to be necessary for the protection of the association and the best good of all its members. Copies thereof will be securely posted in a convenient place near the Separator or Creamer, that ignorance may be no excuse for neglect.

Patrons who are not disposed to be governed by these rules are requested to so advise the trustees or directors, and the treasurer will make prompt settlement with any who wish to withdraw.

It is recommended that every patron provide himself with a Babcock Test to use at his dairy, in order that he may know just what he is doing, and which cows are good ones and which poor ones. The cost of the Tester is slight, and the information to be gained by its use is most valuable.

It should be remembered that refusal on the part of any patron to adhere to the rules as here laid down, or neglect or violation of any of them, not only affect the patron himself, but his brother patrons are likewise affected, as well as the product of the factory. Therefore it is for the interest of all to see that everyone follows the rules here given, which are based on sound dairy sense.

Rules for Whole Milk Creameries.

Feeding.

(See under that heading in the foregoing.)

Milking.

(See under that heading in the foregoing.)

Care of Milk at the Dairy.

Milk run through an aerator immediately as soon as drawn from the cows is better for butter making. Where milk is delivered at the creamery but once a day the night's milk must be cooled and aerated immediately after drawn from the cows, and the cans containing the milk set at once in cold water. The best method of cooling is to use an aerator which will cool the milk and at the same time aerate it. If an aerator is not used the cans of milk should be set in cold water and the milk cooled by using a dipper and pouring until the milk is thoroughly cooled. The cans of milk must be left in this cold water until they are carried to the creamery, and the place of setting must be chosen with care. Stagnant water, dead carcasses, or filth of any kind in the pasture or barnyard produces tainted milk, and for this reason, see that the cans of milk are set in a clean place safely removed from contact with any odors.

Night's Milk.

Mixing the night's milk with that of the next morning is not allowed. It will many times sour them both by pouring the warm milk into the cold.

Watering or Skimming.

The State laws are very strict against watering or skimming, and a heavy fine is imposed when detected. Offenders will be summarily dealt with by the Association.

Milk Gatherers.

Where creameries pay a gatherer to carry the milk to the creamery, it is the duty of this gatherer to accept only such milk as is in a sweet and untainted condition, and he shall examine all milk before placing it in his wagon, to see that it is not sour nor tainted in any way.

Carrying Cans.

Small cans (five to ten gallons) are much preferred to larger ones as the milk is kept in better condition.

These cans must be thoroughly cleansed every day and be free from taint or odor before the milk is poured into them. If skim-milk is taken home in these same cans, empty at once, wash with tepid water, then scald and turn them out to the sun.

Receiving Milk.

Whole milk shall be received and weighed at the creamery, sample being taken by the Babcock Test, under the composite test plan, or such other plan as may be adopted. The skimmed milk shall be weighed back to each patron in proportion to the amount of milk that he has furnished.

At the Creamery.

Insist that the milk be received by the Babcock Test, and division made among the patrons by that test.

Insist that the butter maker keep the skim-milk vat clean by thoroughly washing and scalding as often as is necessary, so that the skim-milk may be sweet when returned to the patrons for feeding.

Insist that cleanliness be observed in every detail of the creamery work.

Insist that a first-class butter maker be employed who will produce a high grade of butter.

See to it that the creamery is furnished with the best apparatus to be had, as a good product is very largely dependent upon good apparatus.

Note the Reasonable Figures for Complete, Well-Equipped Plants.

\$1,950.

My butter factory cost me, complete, including well finished and convenient building, and all apparatus, \$1,950. The apparatus, which includes a U. S. No. 1 Separator, was purchased of the Vermont Farm Machine Company, and has given the very best of satisfaction.

Hopkinton, St. L. Co., N. Y., Oct. 15, 1894.

SILAS H. SANFORD.

\$2,000.

Our Elgin factory cost us, for building and machinery, \$2,000.

Elgin, Penn., Oct. 18, 1894.

ELGIN CREAMERY CO.

\$2,001.

My creamery plant, building and apparatus, cost me in full \$2,001. The U. S. No. 1 Separator has given excellent satisfaction. I have found that it separates the cream as close as one-tenth of one per cent. I can safely recommend it to creamery men as a machine that is in every way adapted to their use, because it is simple in construction, easily managed, cleaned and kept in repair. It is a great advent in the work of creameries, and enables the user to make a more uniform type of butter.

Mongaup Valley, N. Y., Nov. 3, 1894.

WILLIAM JONES.

\$2,006.

Ours is the most convenient plant in this part of the country. It cost, all told, building and machinery (which includes a No. 1 U. S. Separator), \$2,006. I often hear it remarked by men travelling through the country that we have the finest and most complete creamery plant that they have seen in this part of Northern Pennsylvania.

Rushville, Susq. Co., Pa., Nov. 9, 1894.

RUSHVILLE CREAMERY CO.

\$2,040.

I am highly pleased with the outfit for my creamery, purchased of the Vermont Farm Machine Company. Cost of apparatus, \$1,440, cost of building, \$600. Can handle 10,000 to 12,000 pounds of milk per day. I run about 2,000 pounds of milk per hour through the U. S. No. 1 Separator, and I have become tired of making tests of the skimmed milk, because there is practically no butter fat left.

Spencerport, N. Y., Oct. 13, 1894.

J. C. ROSS.

\$2,265. (See Illustration, Fig. 31.)

Our creamery complete, with full apparatus, cost \$2,265. We have now run the outfit we purchased of you over one year, and we can say it has given us perfect satisfaction. We feel we cannot recommend the No. 1 U. S. Separator and your style and quality of Vats too highly.

We have examined a great many creameries, and believe we got the best grade of goods obtainable and at very reasonable prices, and your treatment of us has been beyond reproach.

Adena, O., Dec. 24, 1894.

ADENA CREAMERY CO.

\$2,300

Built and equipped the Mount Pleasant (O.) Creamery.

\$2,400.

The creamery outfit purchased of you, which includes a U. S. No. 1 Separator, all set up in good running order, cost me about \$1,400. It is first class in every respect, and I think as good an outfit as can be found in the county. The building is an old one repaired, but is a good one for the purpose. It could be built for \$1,000.

W. W. SISSON.

Tunnel, N. Y., Oct. 16, 1894.

\$2,500.

Our main plant, building and machinery, cost \$2,500. The machinery which we purchased from you is giving good satisfaction.

W. A. GILCHRIST, Sec. and Treas.,

East Ryegate, Vt., Oct. 18, 1894.

East Ryegate Creamery Co.

We furnish Combined Butter and Cheese Factories and Creameries on the Elgin Separator System, or any system desired.

Entire Cost, \$2,600; Saving of \$1,400.

In round numbers, the entire cost of our plant when ready to run, building, machinery outfit, well, etc., etc., was about \$2,600. This was a saving of at least \$1,400 from prices asked by a certain western firm who put up complete outfits of the same capacity.

We worked up our own stock subscription, gave our building contract to a local carpenter, who did us good work, bought our apparatus from the Vermont Farm Machine Company, who placed it in position ready to run, and since operating we are well satisfied.

Our building is 65 feet long and 22 feet wide, 14 feet high, with a lean-to 20 feet long and 12 feet wide on one side for boiler and coal room. We took our plan of buildings from a book published by the Vermont Farm Machine Company.

Our Separator is a No. 1 U. S. As to how our creamery compares with others, we have had many visitors since our plant has been running, and have heard many comments. Our best testimonials are from traveling produce commission men, who visit many creameries, and they universally say we have as complete and convenient a plant of its size as they see anywhere.

Board of Directors, New Concord Creamery Co.

New Concord, O., Dec. 13, 1894.

W. H. THOMPSON, President,
C. P. MORGAN, Vice-President,
W. STEWART, Secretary.

\$2,700 for Main Creamery. (See Illustration, Fig. 40.)

Our building, including cold storage and ice house, with entire apparatus, cost us \$2,700.

The machinery we bought of you in March, 1893, to equip our creamery plant at East Hardwick, Vt., has given excellent satisfaction. This is especially true of the No. 1 U. S. Separator which has always done very close work, skimming so fine that there would be hardly a trace of butter fat apparent.

Also the machinery which we bought of you in May, 1894, to equip a skimming station at Hardwick, and the machinery for another at Greensboro Bend, all works perfectly, and has proven all represented.

These stations were furnished with your U. S. No. 1 B Separators which do very fine work and are light running machines; our butter maker and myself having come to the conclusion that the No. 1 B does even finer work than the No. 1 A, which we thought was perfect and which has always done very fine work.

If we were to equip more stations, should certainly put in the same as we have already done.
East Hardwick, Vt., Dec. 27, 1894.

W. L. DOW,

Secretary Lamoille Valley Creamery Ass'n.

\$2,915.

We give you the cost of our plant, which is one of the best in the state. Cost of plant complete, including building and all apparatus, which we bought of the Vermont Farm Machine Co., \$2,915. Any person or company wishing to know about the best machinery can write or call on me, and I will try and give them the facts. I feel I cannot say too much for the outfit we have. We use one No. 1 U. S. Separator. The most butter fat we ever found in the skimmed milk, as near as we could read it, was six hundredths of one per cent.

Hawleyton, N. Y., Oct. 15, 1894.

MYRON MEEKER, Secretary,
Hawleyton Creamery Co.

Plant Cost \$2,939. Second to None in State.

Our building complete, consisting of a main building 25 x 64 feet, posted (and for convenience of arrangement second to none in the state) with a canto 40 x 13 feet for engine room, wood-house and skim milk room, and all thoroughly built, cost \$1,500.

The machinery which we bought of the Vermont Farm Machine Co., including everything needed for a well equipped creamery, and all proving the best of its kind, cost \$1,439; making cost of whole plant, \$2,939. The U. S. Separator does all you claim for it. I have run three different kinds of Separators before this one, and in quantity and quality of work done I believe the U. S. stands ahead.

Lancaster, N. H., Nov. 1, 1894.

F. C. GRANT,
Supt. Israel River Creamery.

Do not Sign any Contracts nor Bind Yourself in any way until You have Examined carefully into Our Claims. It will Save You Money Whether You Buy of Us or Not.

Here are More Testimonials from Parties who recognize a Good Thing when they have it.

Only \$3,000 for a Plant we take great pride in. (See Fig. 22.)

We do not hesitate one moment in recommending your Company to all sections of the United States which are contemplating the erection of creamery plants. I can truthfully say we take great pride in showing our building and the machinery within. Everything is working finely.

As a further testimonial I would say, our plant, all ready for separating, cost us \$3,000, and your Company did even better by us than the contract required. **LESTER JUDSON,**
Otisco, N. Y., July 22, 1895. Sec. and Treas. Otisco Creamery Co.

Best for Durability and Superior Workmanship.

We constructed our creamery a year ago and fitted it up with your goods. Everything has given thorough satisfaction, and we take pleasure in saying that for durability and superior workmanship we believe your creamery supplies are the best in the market.

STRAFFORD CREAMERY CO.,
Strafford, Vt., Nov. 20, 1894. H. L. Hatch, Sec.

Superior to any Others.

We consider your creamery fixtures superior to any other make. We have used them in our creamery for the past eight years, and think you give the most in capacity, durability and quality of any house.

AUSTINVILLE CREAMERY CO.
Columbia X Roads, Pa., Nov. 21, 1894.

Owe Success to Fine Equipment.

Eight years ago last spring we built our creamery and equipped it with your apparatus. We began with about twenty patrons, and have steadily increased until we have now 110 patrons. We are also using your Steam Motor Babcock Tester, which is an indispensable implement in a creamery. We owe a great deal of our success to being well equipped.

J. A. KLINE, Supt.,
No. Egremont, Mass., Nov. 27, 1894. Egremont Creamery Co.

Well Pleased.

In regard to your machinery used in our creamery, we can say that it gives us good satisfaction and we are well pleased with it. We have run over 5,000 pounds of milk in two hours through the U. S. No. 1 Separator, and it does its work well. We could find hardly a trace of fat in the skimmed milk.

BARNES & WHITAKER.
Whitney's Point, N. Y., Nov. 20, 1894.

Satisfactory in Every Respect.

After eight years of constant use we desire to say to you that the creamery apparatus you supplied has proved satisfactory in every respect. We consider your goods first class and superior, as regards durability and working qualities.

Our butter maker, L. H. Mallory, during the summer of 1894, was able without a helper to make from 500 to 600 pounds per day, putting it all into pound prints.

BERKSHIRE HILLS CO-OP. CREAMERY ASSO.
Monterey, Mass., Nov. 21, 1894.

Looking for Better but Haven't Found It.

We use apparatus in our creamery as furnished by the Vermont Farm Machine Company, and consider there is no better in use. We have used it for eleven years, and it has given us perfect satisfaction. We have always had our eyes open for something better and have not found it yet. We find the Vermont Farm Machine Company always up to times, and very prompt in filling orders.

WAPPING CREAMERY CO.,
Wapping, Conn., November 20, 1894. **FRANK AVERY, Supt.**

Apparatus Wears Longer.

We are using your apparatus in our factory and like it very much. The first churn we had was of your make, 200 gallons, and it proving too small, we sold it and bought one of another make. This one rotted out, while the one we sold of your make was yet in use. The one we last bought of you, a 300-gallon Square Box Churn with two covers, we think is hard to beat.

A. J. ABBOTT, Agent,
West Paris, Me., Jan. 25th, 1895. West Paris Creamery Co.

Still More in the Same Strain.

Butter Retails for 50 Cents.

It gives me pleasure to say that we have for nearly six years been using your make of creamery and dairy supplies (almost exclusively in our creamery, and I have never had occasion to wish for a change to goods of any other style or make. Previous to the starting of this creamery, I also used your outfit in a creamery of my own for four years with the most entire satisfaction. I find that your supplies are much better made and contain better material than any goods I have ever seen of other makes.

Our butter sells in Boston for 40 cents per pound, and some is retailed at 50 cents.

New Boston, N. H., Nov. 21, 1894.

NEW BOSTON CREAMERY,

O. A. Newton, Supt.

Your Apparatus Was and Is the Best.

When our creamery was started six years ago (1888), our apparatus all came from your factory. In this section it *was* and *is* considered the best in the market, and we prefer it to any we have ever met elsewhere. It has always given us perfect satisfaction and has proved durable, and when we need to purchase we shall come to you. The Babcock Cream Tester we bought of your agent is giving good satisfaction among the patrons.

Springvale, Maine, November 20, 1894.

SANFORD CREAMERY ASS'N.

No Other Company Equals Yours.

In regard to our general outfit of machinery, there is not another company that can give as good satisfaction as the Vermont Farm Machine Company, in my estimation.

The U. S. No. 1 Separator is doing splendidly; could not ask for a machine that would do better work. It has not given us a minute's trouble since we started. The U. S. is the machine.

E. S. SYMES.

South Peacham, Vt., Dec. 17, 1894.

North Ryegate Creamery Co.

Find Goods First Class.

We have used your apparatus since the commencement of our business in 1887. We have found the goods which you sent us to be first class in every respect: especially are we satisfied with the Steam Motor Babcock Tester which you sent us.

Cromwell, Conn., December 15, 1894.

E. D. HAMMOND, Sec. and Treas.

Cromwell Creamery.

38 Cents Per Pound at Wholesale.

I have used your goods for seven years or more and I have always found them first-class in every respect. I have in use a churn that has been run every day, except Sundays, for six years. It is in good condition in every way, white and clean, and all right for two or three years more.

I have attended State Fairs, World's Fair and Dairy Institutes, and have seen all kinds of dairy implements, but yours beat them all.

As our books will show, we are getting 32 cents at wholesale for our goods, and have been short of butter for two months.

THE SOMERS CREAMERY CO.,

Somers, Conn., Nov. 19, 1894.

E. B. Little, Supt.

Your Apparatus Throughout.

The Ashfield Creamery was equipped with your apparatus throughout in the year 1890, and has given entire satisfaction.

ASHFIELD CREAMERY CO.,

Ashfield, Mass., November 22, 1894.

D. B. Dunham, Supt.

Like it Very Much.

We use in our creamery your apparatus. Have used it for four years or more and like it very much. We think your creamery goods are equal to any creamery goods in the market.

FREEDOM CREAMERY,

Freedom, N. H., Nov. 20, 1894.

Geo. I. Philbrick, Manager.

If Factory Apparatus not wanted, remember we furnish everything for the Dairy also.

Much Superior to Western Manufacturers.

In regard to the outfit purchased of you will say that it gives entire satisfaction. Think that in workmanship and quality of material used, it is superior to that made by western manufacturers. The No. 1 U. S. Separator, especially during the last year, has been less trouble and expense than any used in this vicinity, and there are many used here.

We have, during the past year, paid three dividends of 10 per cent each, which is considered very good hereabouts.

Brunswick, Lake Co., Ind., Dec. 2, 1894.

JOHN N. BECKMAN,
Manager Brunswick Creamery Co.

Convenient and Durable.

We have used your creamery apparatus and fixings in our creamery, purchased of you in the spring of 1888, and find all to work as recommended, believing it convenient and durable as the best.]

PUTNAM CREAMERY CO.

Putnam, N. Y., November 21, 1894.

Perfectly Adapted to the Business.

We have used your appliances for the manufacture of butter in our creamery continuously since we started in business in 1887, and consider them as perfectly adapted to the business, and take pleasure in testifying to their usefulness and durability.

Colchester, Conn., Nov. 19, 1894.

COLCHESTER CREAMERY CO.,
W. P. Adams, Manager.

Abreast with Times in All Improvements.

This Association was incorporated in 1881, and is the oldest in the state. We have used the cream vats, churns, butter workers, etc., manufactured by the Vermont Farm Machine Co., and these goods have given entire satisfaction. On account of their promptness and fair dealing we have found it a pleasure to do business with this company, and I think they keep abreast with any other company in all improved creamery supplies.

HAMPTON CO-OPERATIVE CREAMERY ASS'N.,

Easthampton, Mass., November 20, 1894.

W. H. Wright, Treas.

Stands First.

We have used your apparatus in our creamery for five years, and can truly say that it has given us the best of satisfaction, and in our opinion it stands first in comparison with all other like machinery.

SHUSHAN CREAMERY CO.,

Shushan, N. Y., November 19, 1894.

G. A. Armstrong, Sec.

Well Pleased.

We have used your apparatus in our creamery two years and a half, and we are well pleased with it.

SANDY RIVER CREAMERY CO.,

Phillips, Maine, November 19, 1894.

First Class.

We are using a full line of creamery supplies furnished by you, and find them first class in every respect.

EAST PITTSTON CREAMERY ASSOCIATION,

East Pittston, Maine, November 20, 1894.

E. E. Hanley, Manager.

From Largest Milk Contractors in New England.

All the apparatus we have purchased of your company has given good satisfaction. We are using churns, butter workers, and other goods necessary in manufacturing butter. We are very ready to recommend anything in your line that we have used.

Boston, Mass., November 21, 1894.

D. WHITING & SONS.

Ask for Our 100 page Pamphlet of Creamery and Dairy Supplies.

Opinion of Largest Creamery in Massachusetts.

This is to certify that we have used in our creamery apparatus purchased from the Vermont Farm Machine Company since 1886; that all have given good satisfaction, and, in our opinion, are the best offered for making and handling butter.

CONWAY CO-OPERATIVE CREAMERY.

Conway, Mass., Nov. 21, 1894.

By H. W. Billings, Treas.

Used It for Six Years.

When the Suffield Creamery was started six years ago, it was furnished with a full line of your apparatus, which we are still using with good satisfaction.

Recently we have put in one of your steam Babcock Testers, which does the work very nicely, with very little steam or friction.

THE SUFFIELD CREAMERY CO.

Suffield, Conn., November 20, 1894.

E. A. Russell, Pres.

Stand the Test of Service.

The large amount of implements we have bought of you within the last few years for our different creameries are standing the test of service, and show good construction and workmanship.

Bridgeport, Conn., November 21, 1894.

ROGERS & MORFORD.

Ten-Fold Increase.

The Woodstock Creamery Company have used the Vermont Farm Machine Company's apparatus, complete, since the start, four years ago. It has given entire satisfaction. Have increased from 800 lbs. per week to over 8,000 lbs. per week, at an average net price to patrons of 22 cts. per pound.

Woodstock, Vt., November 20, 1894.

WOODSTOCK CREAMERY CO.

Pleasure to do Business With You.

We purchased of your house seven years ago our entire creamery outfit, and I must say we have been well satisfied with it. We have always found you gentlemen that it is a pleasure to do business with. Our Improved V. F. M. Co. Butter Worker is doing excellent work.

S. M. NUTTING, Treasurer and Manager

Westminster, Vt., November 20, 1894.

Valley Creamery Co.

When Wanting New Goods, Buy Ours.

Our factory was established about ten years ago, and we are now using the vats that were first placed in the works, which are still in good condition.

The best evidence of our opinion of your goods is the order we placed with you in September for a five hundred gallon Square Box Churn with pulley around center, after examining other makes and finding in our judgment, that yours was ahead.

POMFRET CREAMERY CO.,

Pomfret Landing, Conn., Nov. 20, 1894.

T. M. Totman, Treas.

Right Goods for a Creamery to Have.

We have been using your goods and apparatus in our creamery for the last ten years and are satisfied that the goods you manufacture are the right kind for any creamery to have, they, in our estimation, taking the lead of all others for simplicity and durability.

HIGHLAND CREAMERY CO.,

West Hartford, Conn., Nov. 21, 1894.

Timothy Sedgwick, Sec. and Manager.

Utensils of First-Class Quality.

I am now in charge of two creameries; one here, West Glover, and the other at South Albany, Vt. The utensils made by the Vermont Farm Machine Company are of first-class quality, and I wish to call attention in a more especial manner to the No. 1 U. S. Separator. I have used many different kinds, and of them all I like yours the best.

JOS. E. TETRAULT,

West Glover, Vt., Nov. 26, 1894.

Manager for Haines, Hanchet & Co.

Perfect Satisfaction Given Users of Our Apparatus.

Everything Gives Perfect Satisfaction. (See Fig. 41.)

The machinery and apparatus used in our creamery building consists of a 12 horse-power Excelsior Boiler and 8 horse-power Engine, a 400 gallon Square Box Churn, a V. F. M. Power Worker, etc., etc. All these and the other necessary fixtures, everything connected with the creamery that we purchased of you, have given perfect satisfaction. The Vats are to all appearances just as good, and all the machinery runs just as well as it did three years and a half ago when we first began to use them. Our motto was to get the very best to be had, and your goods have been all anybody could expect.

Lyndonville, Vt., July 3, 1895.

W. I. POWERS,

Manager Lyndonville Creamery Co.

Highly Satisfactory.

We commenced work in our creamery about nine years ago. Our business with you in supplying our wants has been highly satisfactory, all goods received from you being made up in the best manner possible.

Windsor, Conn., November 20, 1894.

THE WINDSOR CREAMERY CO.,

T. W. Loomis, Pres.

Heartily Recommend your Goods.

As President of the Blackstone Valley Co-operative Creamery Company, I can heartily recommend your apparatus, after having used it in our factory for three years.

Uxbridge, Mass., November 20, 1894.

GEORGE F. DAY, Pres.

Unsurpassed.

I can cheerfully say that I have used your machinery in my creameries the past eight years, and for quality of material and fine workmanship, I consider it unsurpassed.

Sudbury, Vt., Nov. 21, 1894.

A. G. JONES.

Butter Received Award at World's Fair.

We wish to express our satisfaction in regard to your machinery that we have had in use in all departments since 1885. We have grown from a small creamery to **the largest in the state**. Our make for 1893 was 291,146 pounds butter. At the World's Fair our butter received the highest award medal and diploma.

Lebanon, Conn., Nov. 19, 1894.

LEBANON CREAMERY CO.,

I. W. Stark, Supt. and Treas.

\$2,200.

Our plant cost us \$2,200 when we got it to running. We bought the apparatus of the Vermont Farm Machine Company, and it has given us good satisfaction. With our No. 1 U. S. we get more butter from 100 pounds of milk than the Russian in a creamery near by.

De Ruyter, N. Y., Oct. 13, 1894.

QUAKER BASIN BUTTER CO.

Built From Your Plans.

Our creamery, built in 1889 from plans obtained from your company, has, during the five years of its existence, been operated almost wholly with machinery and apparatus obtained from the Vermont Farm Machine Co. During this time we have found said company prompt and square dealing at all times.

Henniker, N. H., Nov. 26, 1894.

CONTOOCOOK VALLEY CREAMERY COMPANY,

George H. Dodge, President.

Never Disappointed in Getting the Best.

I use your apparatus in my creamery, and it gives the best of satisfaction, and when I order goods of you I expect the best, and am never disappointed.

Barton Landing, Vt., Nov. 26, 1894.

J. G. TURNBULL.

Our Motto—First-class Goods at Reasonable Prices.

Your Goods Way Ahead of Others.

We have been using your creamery apparatus for the past seven years, and it is in good condition at the present time. We also purchased at the same time from another concern a quantity of vats, and such goods as they made. These goods were nearly worthless and have long since been replaced by more substantial goods. We have since enlarged our factory and knowing the quality of the V. F. M. Co.'s goods, ordered cream vats, churn, Babcock tester, etc., of your make.

We have used your No. 1 U. S. Separator three years, and after trying beside the Alpha ordered another No. 1 U. S., which gives perfect satisfaction.

Friendship, N. Y., Nov. 24, 1894.

LATTA & HOBART.

Gladly Advise Any One to Apply to You.

We have used your outfit for co-operative creamery six and a half years, and we are well satisfied with it, and would gladly recommend any one who contemplates starting a creamery, either co-operative or private, to apply to you before purchasing elsewhere.

SINGLETARY CO-OPERATIVE CREAMERY ASSN,

West Milbury, Mass., Nov. 22, 1894.

Chas. N. Woodbury, Treas.

After Five Years' Use.

We have used the goods we bought of you for the past five years, and can say that they have given good satisfaction.

Macedon, N. Y., November 23, 1894.

W. D. HERENDEEN.

A No. 1.

The past six years I have used your apparatus in my creamery and always found your goods A No. 1.

Keene, N. H., November 24, 1894.

KEENE CREAMERY,

C. G. BRITTON.

Entire Satisfaction.

The apparatus in our factory furnished by you, is giving entire satisfaction. We have been using it for over five years.

Somerset, Penn., Nov. 23, 1894.

SOMERSET DAIRY CO.

Superior to any I Have Seen.

I have used your apparatus for the manufacture of creamery butter for over seven years, and think it superior to any I have seen.

Bethel, Maine, November 23, 1894.

BETHEL DAIRYING CO.,

A. F. Tilton, Agent.

Material and Workmanship First Class. Repairs Small.

The butter factory supplies of your manufacture which I have used constantly for five years have given excellent satisfaction. Their material and workmanship are first-class, which makes expense of repairs very small. I have used implements from some other manufacturers which have cost more for repairs than the first cost of the articles. I consider durability a very important point in selecting machinery.

West Garland, Maine, November 19, 1894.

SILVER LAKE CREAMERY,

F. J. GERRY, Prop.

We Take Pleasure in Praising Your Apparatus.

We take pleasure in bearing testimony to the satisfaction your creamery apparatus has given everywhere. Since you put in our whole equipment, about six years ago, with the exception of butter worker, we have been running every day—and we think successfully—without any expense worth mentioning for repairs.

The power butter worker we got from you a year ago last spring, after having tried and discarded two other makes, is very satisfactory.

RIDGEFIELD CO-OP. CREAMERY ASSOCIATION,

Ridgefield, Conn., Nov. 24, 1894.

A. Blochman, Manager.

Complete Working Drawings for Buildings furnished parties buying Apparatus of us.

Have Run Several Creameries with Your Fixtures.

Your apparatus has been used exclusively in this factory for three years and has given first-class satisfaction. We have laid out nothing on repairs since starting. I consider your fixtures superior to any other make on the market, having run several creameries fitted with your fixtures.

CHESTER CO-OP. CREAMERY CO.

Chester, Mass., Nov. 19, 1894.

B. C. Bliss, Supt.

Bought Yours after Thorough Investigation.

We have been using the creamery apparatus purchased of you last March, starting the same the first of May, and it has given entire satisfaction. Before buying our goods we spent considerable time looking up the different kinds of creamery goods, and considered yours the best, quality and price being considered. The No. 3 U. S. Separator was started June 1. Through June, July and August we averaged to run 3,000 pounds of milk each day, testing samples by Babcock test at different times each day. We have not found above one-tenth of one per cent of fat left in the skim milk after running the machine four hours, at any of those tests. The repairs on our entire plant have been less than five dollars since we started.

Sheffield, Vt., Nov. 19, 1894.

SHEFFIELD CREAMERY, A. H. DAY, Manager.

Always Take First Premium.

We have used your creamery apparatus ever since our creamery started, about eight years ago, and it has given very good satisfaction. We have examined several other makes of churns, butter workers, etc., but consider yours the best of any that we have seen. We have always taken first premium on our butter wherever exhibited and have no doubt but that a portion of our success is due to your improved machinery for butter making.

SOUTH COUNTY CREAMERY.

Hope Valley, R. I., Nov. 19, 1894.

W. F. Joslin, Gen. Manager.

Testify to Merit of Goods.

It gives us pleasure to testify to the merit of your goods, which have been in daily use in our factory for the past six years.

THE JEWETT CITY CREAMERY CO.,

Jewett City, Conn., Nov. 19, 1894.

J. E. Leonard, Sec. and Treas.

Ten Years' Use. None Better.

We are using your machinery throughout in our creamery, and think there is none better. I have visited a good many creameries and have seen all kinds of apparatus for making butter, but I think there is none better than yours. We have been running ten years and think we have given it a pretty good trial.

NORTH BROOKFIELD CREAMERY,

North Brookfield, Mass., November 18, 1894.

H. E. Cammings, Prop.

Spent Considerable Time Looking Around.

Some six years ago, when we were thinking of starting a creamery, we spent considerable time in looking around, and investigated the various systems, and finally settled on yours. Since that time, becoming quite familiar with different modes and systems, we are becoming more convinced every day that we made no mistake.

CLAREMONT CREAMERY,

Claremont, N. H., Nov. 19, 1894.

W. B. Ellis, Treas.

When Buying Larger, Chose Yours.

We have used your apparatus in our factory since it started, some ten years ago. We are well pleased with it in every way; so well that, two years ago, when we were obliged to put in apparatus of larger capacity, we chose that made by the Vermont Farm Machine Co. The old fixtures were still good, but, owing to an increase in business, were too small.

BRUNSWICK CREAMERY COMPANY,

Eagle Mills, N. Y., Nov. 19, 1894.

L. B. Thurston, Supt.

Have Used No Other.

We are pleased to say that we use your apparatus in our factory; that we have used no other since the beginning of our business in 1888; that it has given perfect satisfaction; that we find no inducement to change it for any other, although we have had several offers, but prefer yours.

SPRINGFIELD MTS. CO-OP. CREAMERY ASSOCIATION,

Hampden, Mass., Nov. 26, 1894.

L. D. Alden, Treas.

We furnish Separators, Creamers, Churns, and all Apparatus for Butter Making, each the best of its kind.

Perfect in All its Parts and in its Work.

(See Floor Plan, Fig. 34.)

Our creamery building, including ice-house, cost \$900. Our plant complete cost \$3,000, and we think it is one of the most convenient of any we have seen. The machinery we purchased of the Vermont Farm Machine Company, and it is perfect in all its parts and in its work. Any one in want of creamery machinery would do well to give them a call before purchasing, as we have found them to be perfectly honorable in all their dealings. CHAS. F. PARKER,

Wolfborough, N. H., Dec. 21, 1894.

Treas. Wolfborough Creamery.

We Recommend Use of Your Goods.

We have used the Vermont Farm Machine Company's apparatus for the past seven years. It has given good satisfaction, and we recommend the use of said apparatus.

Wellesley Hills, Mass., Nov. 27, 1894.

THE WELLESLEY CREAMERY CO.,

Edward Lyon, Treas.

Never Have Seen Apparatus Equal to Yours.

I have used your apparatus for making butter six years, and have never seen any apparatus equal to that made by you.

Peterboro, N. H., Nov. 21, 1894.

PETERBORO CREAMERY CO.,

C. E. Henry, Supt.

Heartily Recommend it to Anyone.

Having used your apparatus for the past six years, and it having given us good satisfaction during that time, we heartily recommend it to anyone in the creamery business.

Salt Point, N. Y., Nov. 26, 1894.

SALT POINT CO-OP. CREAMERY ASS'N.

Superior for Cleanliness, Convenience and Durability.

I have used your factory implements in my creamery for five years. For cleanliness, convenience and durability I consider them superior to any other make.

Tacoma, O., Nov. 22, 1894.

L. P. BAILEY.

We Get Top Prices.

The East Hampton Creamery began business in 1889, using your apparatus throughout, and it has given entire satisfaction. Our goods bring top price for Connecticut prints.

THE EAST HAMPTON CREAMERY CO.

East Hampton, Conn., Nov. 24, 1894.

Geo. K. White, Supt.

Cannot Be Equalled.

It affords me much pleasure to say that, after using your apparatus in our factory for the past nine years, I am convinced that the Vermont Farm Machine Company's goods cannot be equalled by any.

Melrose, Conn., Nov. 30, 1894.

THE ELLINGTON CREAMERY CO.,

A. M. Bancroft, Supt.

Find It Very Satisfactory.

The Montague Co Operative Creamery Company, which fitted up with the machinery manufactured by you, find it very satisfactory. We have been using your apparatus since Oct. 1, 1891, and can highly recommend it in every respect.

Montague, Mass., Nov. 26, 1894.

G. H. GODDARD, Pres.

A. M. LYMAN, Treas. and Manager.

GEO. G. HENRY, Supt.

Do not forget that the Vermont Farm Machine Company are headquarters for all apparatus and supplies used in the Dairy or Creamery, and that they have equipped more Creameries than all other concerns combined in the East. We are the largest manufacturers of this line of goods in America.

Send for Pamphlet of the Improved United States Separator.

Nothing Better.

Would say that we have used your apparatus for the last five years, and it has given us good satisfaction. We are of the opinion that there is nothing better.

North Stonington, Conn., Nov. 20, 1894.

TAUGWANK CREAMERY CO.,

W. H. HILLARD, Sec. and Treas.

Used Your Implements Ever Since We Began.

We have used your implements ever since we began business, seven years ago, and they have given perfect satisfaction. Especially would we recommend your "Saratoga" Trunk Churn, which pays for itself every year in saving of fuel, as it requires much less power than others we have used.

Berlin, Conn., Dec. 1, 1894.

GOLDEN RIDGE CREAMERY CO.,

F. DEMING, Supt.

I Like Your Apparatus Best.

I would say that we have used your apparatus in our creamery for the last four years with the best of results. I like your apparatus the best of any I have seen.

Green's Farms, Conn., Dec. 4, 1894.

GREEN'S FARMS CREAMERY ASS'N.,

G. Hattin, Buttermaker.

Were We to Commence Again, Would Use Yours.

We have used your apparatus for nearly ten years in our factory, to our entire satisfaction. Were we to commence again, we would buy our apparatus, including a Babcock Tester, of the Vermont Farm Machine Company.

Ashby, Mass., Dec. 4, 1894.

L. U. MAYO,

Sec. Ashby Creamery Co.

Steady Gain, Because You Started Me Right.

Six years ago, after a careful investigation of different creamery plans and outfits, I placed my order with you and started in the creamery business, with a not very encouraging outlook, as some of my neighbors wished to start on the co-operative plan, with a costly outfit from another company. But I have made a steady gain, and now have those among my patrons from two creameries that have since shut their doors.

As much of my success is due to your help in starting me right, and with an outfit that has proved satisfactory in every way. I do not hesitate to have you use my name if you wish, as I can, from experience, state to all in need of creamery and dairy supplies that they can make no mistake by placing their orders with you.

Caton, N. Y., Dec. 5, 1894.

CATON CREAMERY,

C. E. Bower.

Have Visited a Number of Creameries—Find Ours Ahead.

We have a creamery which is first-class in every respect, equipped with machinery which was furnished by your company. We have visited a number of creameries and find our outfit far ahead of any that we have seen. The machinery which you furnished us is doing good work and we are fully satisfied that there is no better apparatus to be had than that furnished by your company.

Stratford, N. H., Oct. 15, 1894.

WATERS BROS.

Your Machinery Fills the Bill.

We adopted your system in 1889 in our creamery, after carefully looking into others, and have as yet never regretted it. We find your machinery fills the bill, is well constructed, and gives entire satisfaction.

Goodspeed's Landing, Conn., Dec. 8, 1894.

EAST HADDAM CREAMERY CO.,

W. R. Goodspeed, Supt.

Ever Since the Formation of the Company.

We have used your apparatus in our factory ever since the formation of the company, more than five years ago, with perfect satisfaction. We find your goods superior to any others with which we are familiar.

Northville, Conn., Dec. 7, 1894.

ASPETUCK VALLEY CREAMERY ASS'N,

V. B. Hatch, Pres.

The Best Workmen Use the Best Tools. Note the Following.

Best on the Market.

We have used your goods in our creamery for the past seven years and consider them the best on the market. We think your Steam Motor Tester the best machine of the kind.

LIVERMORE DAIRYING ASSOCIATION.

Livermore, Me., Nov. 29, 1894.

196,000 pounds of Butter in a Year.

When our creamery association was organized seven years ago we bought our entire outfit of you, and it has given perfect satisfaction. During the year ending March 31st, 1894, we made 196,000 pounds of butter at an expense of $3\frac{1}{4}$ cents per pound. We think this cheaper than we could make it by any other system.

BRATTLEBORO CREAMERY ASS'N,

West Brattleboro, Vt., Nov. 20, 1894.

Jerome J. Ward, President.

In Constant use Eleven Years.

We have used your Cream Vats, Churns and Babcock Testers in our factories with entire satisfaction. Some of the apparatus was purchased nearly eleven years ago and has been in constant use ever since.

TURNER CENTER DAIRYING ASS'N,

Auburn, Maine, Nov. 20, 1894.

E. L. Bradford, Agent.

Goods all Right.

We have been running our creamery almost nine years. We use the Davis Swing Churn and Skinner Butter Worker. They are giving us good satisfaction. The other fixtures and vats put into our factory by the Vermont Farm Machine Company are all right and A No. 1.

Brimfield, Mass., Nov. 27, 1894.

WORCESTER CO. CHEESE CO.,

O. E. Parker, Sec. and Treas.

From a First-Class New York Creamery.

After eight years' experience in using your apparatus in our factory, we take pleasure in recommending it as giving good satisfaction.

LA GRANGE CREAMERY ASSO.,

Poughkeepsie, N. Y., November 19, 1894.

H. R. Hoyt, President.

A Complete Outfit from You.

Our creamery commenced business Nov. 1, 1888, with a complete outfit of butter-making machinery from you, all of which has given good satisfaction.

RIVERSIDE CREAMERY COMPANY,

Warehouse Point, Conn., Nov. 26, 1894.

Horace Patten, Treas.

As Near Perfection as We Have Seen.

We have used your apparatus in our creamery for seven years, and it has given us good satisfaction. We find all of your goods made in a good manner, and as near perfection for the purpose as any we have seen. We consider the Vermont Farm Machine Company is the company from whom to purchase dairy apparatus at reasonable prices.

Littleton, N. H., November 27, 1894.

WHITE MT. CO-OP. CREAMERY ASS'N.

Since 1885.

We have used your apparatus in our creamery since we started in 1885, and we like it very much.

NORTHFIELD CO-OP. CREAMERY,

Northfield, Mass., November 27, 1894.

J. E. NYE, Supt.

Cannot Be Surpassed.

It gives us much pleasure to state that the apparatus in use in our factory, which we purchased from the Vermont Farm Machine Company, has given us most excellent satisfaction. We have found their apparatus to be most thoroughly made and possessed of splendid wearing qualities, so that the machines now in use in our factory, purchased from them, are in first-class condition after continued use, and for convenience and general labor saving we believe cannot be surpassed by any goods on the market. We can most heartily recommend the manufactures of the Vermont Farm Machine Company.

Mercersburg, Pa., Dec. 8, 1894.

MERCERSBURG CREAMERY,

James Agnew, Supt.

Have Used Your Apparatus Since Establishment.

We have used your apparatus in our factory since its establishment in March, 1889, and it has given us great satisfaction. We are especially pleased with the Square Box Churn and the Wooden Jacketed Gathering Cans which we recently bought of you.

Granby, Mass., Dec. 4, 1894.

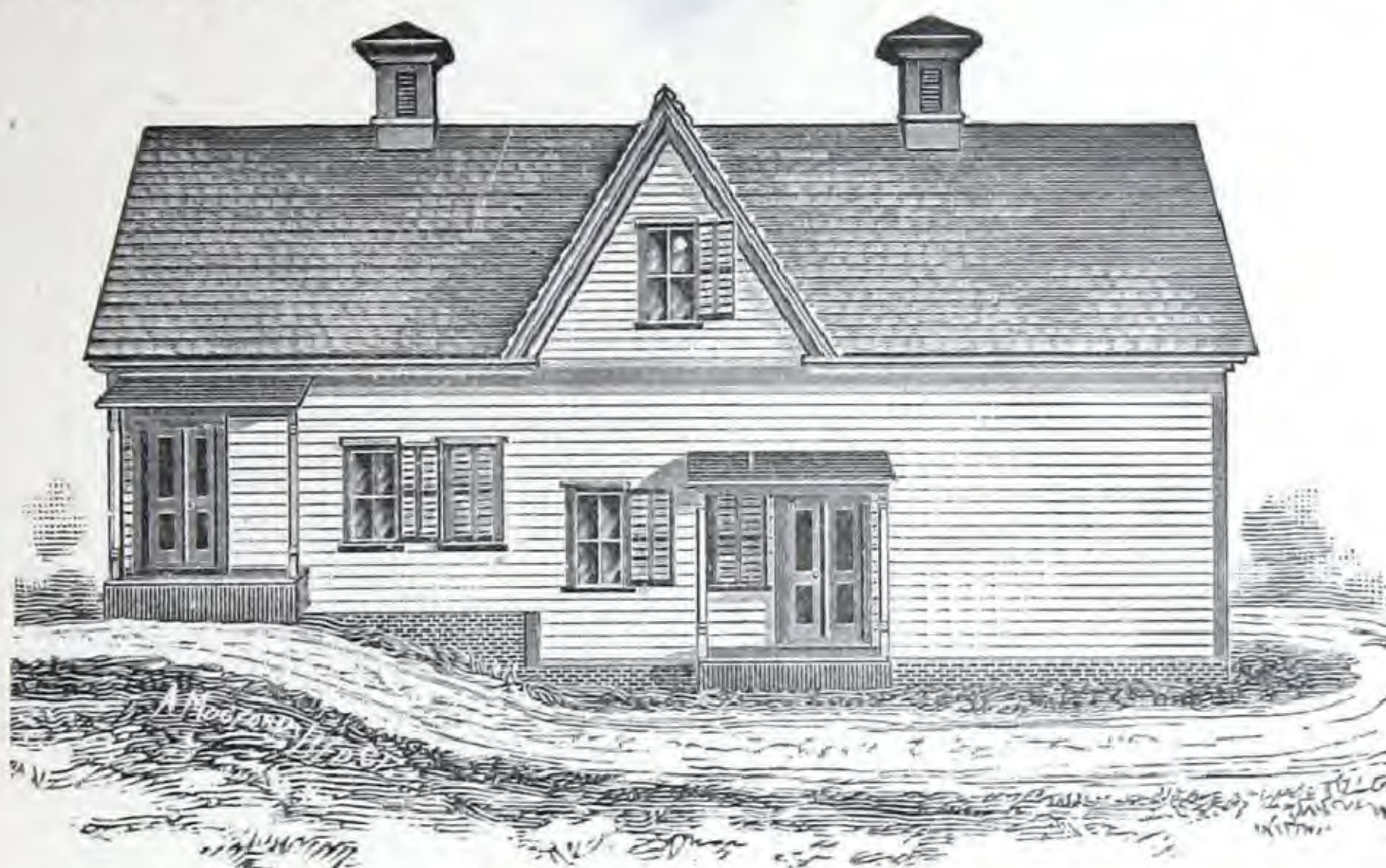
GRANBY CO-OPERATIVE CREAMERY ASS'N,

W. S. Clark, Treas.

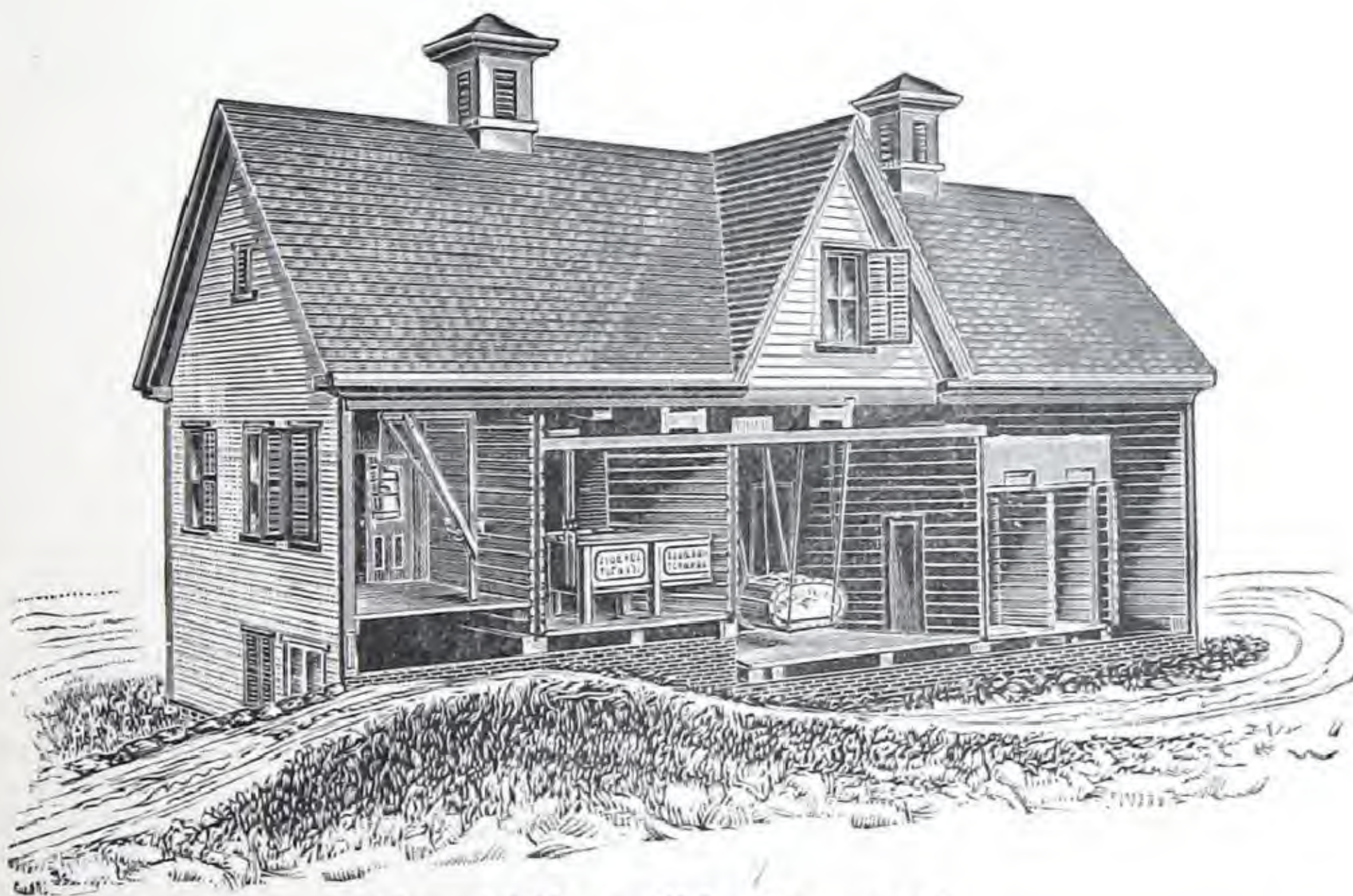
Gold Medal Creamery Building,

Exhibited at the PARIS EXPOSITION.

The illustrations herewith represent the front elevation and also front view with side removed to show the arrangement of apparatus within, of the working model of a creamery, dimensions 2x5 feet, built by the Vermont Farm Machine Co., for the United States Government's exhibition at the World's Fair at Paris, 1889. It was awarded a Gold Medal.



Front Elevation.



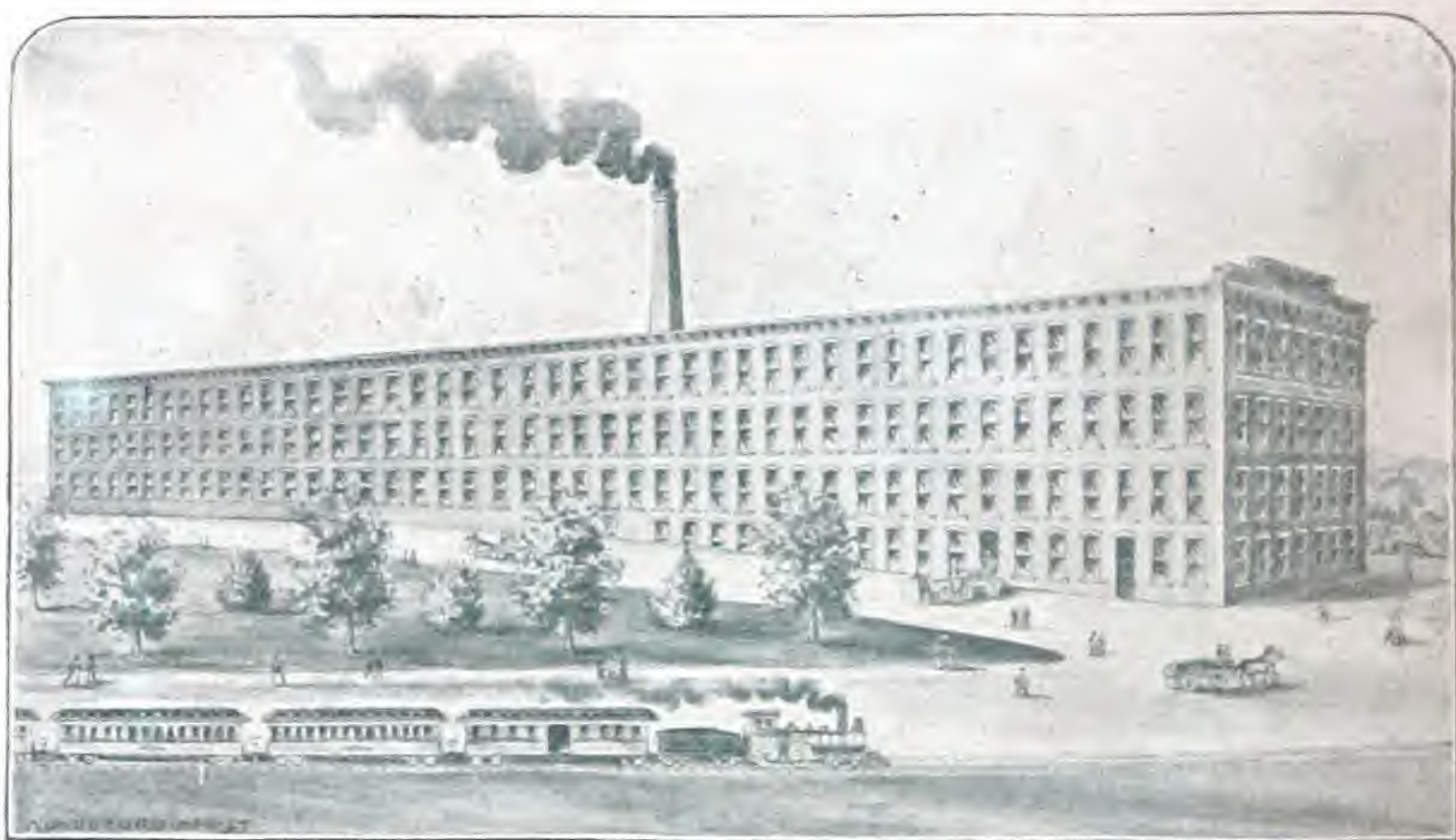
Front View, Side Removed.

This model was equipped with a complete outfit, including engine and boiler Davis swing churn, butter worker, improved cream tempering vat, steam and water pipes; and the machinery was run to illustrate its operation. It was considered the most perfect model ever produced.

This plan has been used in the erection of many creameries in different parts of the country, and has proven to be economical to build and easy to arrange the apparatus for the most profitable and economical running of the creamery.

**Factory of the Vermont Machine Company,
Bellows Falls, Vermont,**

355 x 60 feet,



**Occupied Entirely in the Manufacture of their
Dairy, Creamery and Sugar Apparatus.**